



September 1965

1969 September
TRADITIONAL AUCTION

YEARLING THOROUGHBREDS AND TROTTERS



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Not long ago I was in Leningrad and visited the Piskarevskoye Cemetery, and to I was particularly interested in Dmitri Pasloy's teature "The Siege of Leningrad" (December 1968 and January 1969) and in Alexander Veshin's article on Olea

Bergholtz, "Poetry of the Siege" (October 1568). Much has been done in our country, too, in recent time, to ensure that no one forgets those who had to fight to the Marian Byblok.

Osno, Poland

I liked the articles "Socialism and Relision" and "The Russian Orthodox Church

in New Social Conditions" which appeared in the January issue. From them I have learned a great deal about religion and its followers in the Source Union, But I found even greater enjoyment in "Painter-Poet of Hir Native Land" (February 1969). an extremely interested in painting, as I any an art teacher at a school. I should very much like to see an article about Russian and Soviet painters in every Issue Lech Jatiak, Learno, Poland

The orticle "They Were Problem Children'" in your December 1968 issue about the successes attained in special schools in Durhanhe was most interesting. I have heen teaching in special tchools for 20 wart, some of that time in colonies for invenile delinquents, Thanks to SPITNIK I was able to write to the director of the special school in Dusbanbe, D.I. Feldstein I was overloved when I received his reply and a little later some unique books with on interrption by the author. I am so hanny to be able to exchange notes with

my Soviet colleague I am sorry that yu do not give Russian recipes and those of the other nationalities of the USSR in every issue. I have used your recipes teveral times and the result has been delectable!

Leonard Dewodski. Krakow, Poland

I am a teacher, and am interested in art. I liked the article "Ilya Repin, Painter" in your lanuary issue very much. I read it with my pupils, showed them the reproductions in SPITINIK and took to school other reproductions of Repin's work. It made the lesson interesting for them and they eained a better insight into Repin's painting. My pupils also liked "Man of Fables"

by Sergel Mikhalkov, in the some issue. especially as they have many of his verses in their Russian language textbooks, and My pupils know a great deal about the commonants, and have a special affection for Yori Gargein, the pioneer, They were expectably interested in the article "Valen-

tina Gaparina Tells of Yuri's Last Day" Many ssomen read your magazine, and on their behalf I should like to get you to tell as something about Russian fashlong. Isabella Scowron,

Staszow, Poland

I was delighted by the reproductions of Sergei Geratimov's paintings and sketches in the February itsue. It would be helpful to students of Russian, I believe, if you published riddles and crossword puzzles in each issue. What do other readers think?

Boleslaw Roczynski, Chodziez, Poland

Continued on Page 5

IBSCRIBE to the English edition of SPUTNIK



some of them have a character of source. lity about them and sometimes leave one a little un in the air I narricularly envised the arricle shour Fama Rancockava at I raw a number of Bisenstein's films at a showing in Sydney several years ago. I have always loved the theater and actino and even now I

unidly remember "Ivan the Terrible" I also read with interest the story of the Pamirs, audithed in the Nonember edition. Contratulations to Likhodeves! The photography of the Pamir moontains and the New Arbat buildines in

Moscow were very good. The other comment I have numbered on it a certain amount of aniet proposes. da which it seems necessary to include This may lead me to read the "Spotlisht" again. I agree to a point but would also question some statements

Anyway I am expressing my freedom in writing to you, just to find out a little about the Russian people and to satisfy my own cariosity about how you live. Mary Reed. Essendoir, Australia

I enjoy the articles on science, especially space flights, the breathtaking photographs of the Russian scenery, recipes, cartoons

of Soniet artists and would like to see more articles on them and photographs of their paintings. The books on art that are artists in the Soviet Union. I particularly liked the paintings of Vassili Polenon shown in the December 1968 issue of SPIJINIE

In the future issues I would like to see Russian names printed in the Russian alphabet - if not throughout the magazine, maybe on a pare in the back. I am sure that other readers who are studying Russian small also be interested in seriou Russian names in their usual spelling I mould also like to see more arricles on the life of somes in the Soulet Union

Kathleen Wade Austin, Texas, USA

Continued on Poze 8



puod

icet in SPIITNIK Waterock Kirnetti Pomen Polend Congressiations on not simply convince another magazine but finding your own form, and providing a highly successful mixture of political reientific and entertaining material. I find the choice of articles superb. For me SPUTNIK is a means of contact with the Soviet Union, and the Russian language lessons strengthen that Joachim Lenz, Colorne-Klettenhuer German Federal Republic

The photographic feature in colour on the port of Odessa in your Pebruary

issue was very good. Photographs like

there are just as good as the finest article

about a town I should be very sleated

to see a colour feature of this kind about

Legnice, Polend

any special favourites in it are the arricles shows artists. I stready feel I know Rebin.

Shithkin, and Gerasimov. I also like the

articles about writers and poets, for in-

stance the one about Alexander Tour. dansies, of suborn I am new tond.

I correspond with a siel in Armenia

and the tells me many interesting things

about Armenia and the Soviet Union

generally But I know very little about the history of Russia, and should nerv

much like to read something on the sub-

other Souset towns in every issue. Stanislaw Nowal

I am on English student at percent working in Italy. I read your magazine SPUTNIK farrly regularly and find it pery interesting, particularly the topics on the Russian Revolution and discussions on Indith Richardson

Ivree, Italy There are a number of questions I would like to ask and also a few comments to make. Are the usual stories written in Russian and then translated? Become (APM)

BODIS POLEVOL

ALEXEI LEONOV

NIKOLAL SEMYONOV

(Academician)

/Writer's

SPUTNIK

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ANATOLI SOFRONOV (Writer)

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Section of SPUTNIK

(Writer) WACHESI AV VELYUTIN (Minister of Higher Education) is a vital Soviet magazine.

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about the latest in science and

mechanics, important political

ineuen economic problems

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SPUTNIK: read - be informed!

We welcome your questions,

comments and suggestions which

will be reported in the Letters

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sputi Lyndmila Valueva is one of the thousands upon thousands of Muscovites who go to Sochi for their summer holidaya. Photograph by Mikhail



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I want nen-triends from all over the world, but especially from Africa, West Furane India Ceulan USA and South America I am a 30 user old medical doctor, married, and my interests are music, photography, books, stamps and postcards,

Besil Allyinaton M.D. Mathraki, Corfu, Greece I am a Danish siel soho wants new-pals

from all over the world. I am 16 years old and interested in modern music, I know Inerid Pedersen. Lupinyci 13.

4700 Naestved, Denmark I am eager to correspond with people all over the world. My hobbies are: stamp collection, exchange of abotto and piero-

cards, letter-writing and scientific books. Besides Arabic I also know English. Matri Gharib Rafidain Developments Ltd., P.O. Box 2003, Bashdad,

I would like to have lots of friends from many countries who there at least some of my interests. I am a 23 year old musician and therefore my main love is muric perticularly that of Morart and Bach. Resides I am concerned shout philotophy, the speculation of life beyond our planet, sociology, literature, stamp collecting, art. I just love people, animals and

life. I can write only in English. Natesha Selepak 353 Canning Highway, Como. Western Australia 6152

I say a Rulearian student and an anvious to establish contacts with philatelists readers of SPUTNIK — all over the world. The subjects of my collection are "FYPOAT" "Astronomy" and "Dare" I am also nery much interested in modern music and take recording. I can correspond in English and Russian.

Georgiev Petko Kirev. 21.24 Reharbays Ploshebed, Rostor-on-Don 4.

I would like new-friends in Great Britain and the USA I am 18 years old and 20 to grammer tehnol My main interests are collecting records, postcards and mage zines, I know English, Russian and Ser-Valeria Paulie

Confessions 4. Limblians.

Slovenije, Yugoslavia I am 16 years old and interested in astronomy. I would like to have pen-pals scho are also interested in this subject

I have a telescope (a 2.4 inch refractor on caustorial mounting) and I am setting it up for astrography. Also I am a President of the Harrichure Junior Astronomical Society, so any excess of people I can give to my members. They range in age from 13 to 16. I speak only English.

Craig Diffenderfer. 26 Race St., Middletown, Pa. 17057 HSA

I would like to correspond with friends from different countries. I am 18 years old and I know English, Russian and Polish. My main interest are literature. sports, music and languages.

Elebieta Iakubezak. ul. Humenska 9, m.5. Warsaw 36, Poland I seem to set in touch with more people

I could write to My hobbies are exchange of stamps and first-day covers, films, reading and tames. R.K. Bhartin.

19 Rem Bhawan, Birla Video Viber, Piloni (Rei.)

I am a 16 year old girl and I study at the Lyces. I am very envious to bese some new pols from different countries, My bobbies are: music, cinema, theatre, travel erts, literature, etc. I can correspond in French and in Italian and now I am studying English

Aurelia Dragomit, Serada Particapillor 21 ort. 23. Tieline I. Galetri.

Continued on Page 19

Soviet-French Relations Forge Ahead

by Konstantin Lavroy from "Investia"

In their developing relations as well as in their actions and efforts in the international arena the Soviet Union and France are revealing increating approximation of attitudes toward key problems, even to the point of some of their views he-

comine identical. In both countries the schievements of the third session of the permanent Soviet-French mixed commission last January were met with satisfaction, paving the way as they did toward the conclusion of a further long-term trade agreement for the following five years. The previous agreement had brought about a substantial expansion in trade between the two countries, reaching in four years the figure originally set down to be achieved in five years. France

has now become one of the Soviet Union's leading trade partners in the capitalist world, leaving behind the Federal Republic of Germany The aim is now to double existing

trade, the principal items being industrial equipment and large-scale industrial complexes, with the overall objective of carrying out the joint construction in the Soviet Union of major cellulose, gas, oil and motor car enterprises.

France would be able to share in the construction by contributing equipment and credits, and by subsequently buying part of the pro-

Such forms of cooperation open up broad vistas for trade expansion. As the cooperation agreements are on a long-term basis they can provide for the needs of the Soviet Union's national economic plan, and correspondingly take French requirements into consideration.

10

Reciprocal purchases of consumer goods aroused keen interest in the Commission, the Soviet side saving that over and above the usual purchases for 1969 it was ready to buy 400 million francs' worth of such enods.

Other areas of Soviet-French cooperation which have had appreciable practical results and which have elegrout prospects are the exploration and use of outer space for peaceful purposes such as experimental black-and-white and colour television broadcasts and a Moscow Paris telephone link by means of a Soviet sputnik; high energy physics, including joint experiments using a Soviet accelerator at Serpukhow, where a French 6.000 litre hydrogen bubble chamber (Mirabelle) is to be established in 1970; industrial cooperation in colour television, in particular, in the quantity manufacture of cathode-ray tubes.

The two countries on January 9 signed the world's first inter-governmental agreement on cooperation in medicine and health services, which should help exchange experience leading to the development of new methods of diagnosis and treatment of diseases and the joint manufacture of medical instruments to combut the most intractable of them. Under the two-year plan attention

will be concentrated on virology, medical electronics, construction of artificial organs, organ transplants and medical genetics.

Cultural relations are also being advanced, a protocol signed last December providing for increased and diversified exchange in all fields, and specifically in public education in 1969-70. Much importance is being attached to the study of Russian in France and French in the Soviet Union, involving greater exchange of language teachers for

schools and colleges.

There will be more exchange in the fields of the cinema, radio and television. A series of important undertakings is envisaged in the other arts, including a tour of France by the Bolshoi Theatre company and a visit to the Soviet Union by a large French theatrical company. Exhibitions will be exchanged. among them being a display in Paris of works by the Georgian artist Niko Pirosmanishvili and another entitled "From Urarto to the Twentieth Century" containing works of art through the ages. Soviet museums will also contribute to a Ma-

tisse exhibition in Paris, while one or more French art exhibitions will be beld in the Soviet Union In 1969.70 France will hold a festival of Soviet music and the Soviet Union a festival of French music.

Exchanges of sports and youth

delegations and of visits by outstanding cultural figures will be promoted, and both countries have sorreed to mark outstanding events in each other's cultural lives and to nay tribute to the memory of notable contributors to their cultural

progress. All of this should be seen against the background of the Soviet-French declaration of June 30, 1966, which provided for closer mutually bene ficial cooperation in virtually all spheres, and the strengthening of Sovies-French relations as a vital factor of European and international security.

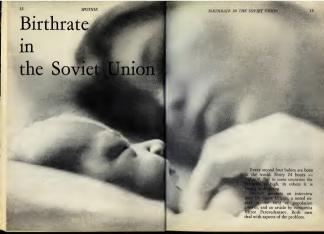
The improvement of Soviet French relations already achieved confirms that there is sufficient scope in the world today for consistent active policies of peaceful coexistence.

Unavoidably the clash of ideologies and differences in industrial and trade structures, stemming from the class nature of the social and state structures, produce difficulties and complications in such cooperation. However, in the critical situations which have arisen in different parts of the world, the two countries have never lost understanding on important problems of maintaining peace. and there has remained a deep interest in improving relations, demonstrating that long-term interests, as distinct from passing considerations, impel the two countries to seek approximation of attitudes, cooperation and friendship

On a number of urgent issues in the international arena, the two countries show considerable similarity of views. Obviously, the removal of the menace of a new war now depends on whether or not the greatest sources of danger to world peace are eliminated in different parts of the globe, and on whether or not a series of urgent steps is

taken to bring about a detente. The Soviet Union and France are adopting much the same lines in their approach to this problem, and in seeking a solution. A number of joint Soviet-French documents show that the two countries are adopting a similar position in relation to the two major botheds of war danger -Vietnam and the Middle East, Statements by the French Foreign Minister, M. Michel Debré, reveal the improvement of mutual understanding between the two countries on the need for a peaceful political settlement of the Middle East crisis Good Franco-Soviet relations constitute a factor of major importunce for European detente and security.

The Soviet Union and France are building their relations on a basis that is free from considerations of expediency, and independent of the state of their relations with other big powers, so that they will not he to the detriment of either country's relations with her friends and allies.



The Birthrate Should be

an interview with Dr. Boris Urlania from the magazine "Nauka i Zhizn" (Science and Life)

Question: Can you please tell us what the birthrate is in the Soviet Union?

Answer: Over the past five years the birthrate in the Soviet Union has dropped appreciably. In 1963 there were 212 births per 10,000 population. In 1967 the figure dropped to 174. This index varies widely, depending on the part of the country. In 1967 it was 324 in Azerbaijan and 356 in Turkmenia. But in the Russian Federation, the Ukraine, Estonia, Latvia and Lithuania the rates were approximately a third of that. The lowest are recorded in Moscow, Leningrad, Kiev, Kharkov

and other large cities. Ouestion: How many babies are born each day in our country? Answer: Around 11.500. But this

is also an average figure which fluctuates widely even from month to month Ouestion: What factors affect the

birthrate?

Answer: Many. For instance, the

degree of involvement of women in public work and in production, their level of education, the number of creches and nursery schools, the effect of marriage and family laws, national traditions, mode of life, climate and lastly heredity.

Ouestion: At the beginning of the twentieth century the rural hirthrate was much higher than the urban. Does this hold true today? Answer: Yes, but the gap has

dwindled - today the rural hirthrate is only 25 per cent higher than the city's However in 1913 rural areas accounted for 82 per cent of Russia's population. Today less than half live in the country and the process of urbanisation will on on.

Question: Do biological factors play a role? Answer: Only heredity, in those

cases when a man or woman connot have children. The age pattern of child-bearing women also merits study. Pre-revolutionary Russia had a high birthrate partly because women married early. In 1910 nearly 55 per cent of all brides were under can be influenced and consequently 20 Look at this table. forecast Question: When do you think a Marrying Age of Women

> Given Age 1910

has managed to slash its hirthrate

by half and stabilise the population.

Under 20

26-30

Oper 50

couple should have children Percentage of Women Marrying at Answer: Medically speaking, the

best age for child-bearing is under 30. The healthiest children are horne by young mothers.

Question: How many children should a couple have in your opin-

countries. So you see, the birthrate

Answer: From the viewpoint of the state, at least two or three, since Ouestion: Can the birthrate be the simple reproduction of the population requires 23 children per 10 Answer: In our own day Japan married couples.

Ouestion: Does this mean that the Soviet Union should take steps to increase its birthrate? Answer: In the republics with a

low birthrate, I believe that family allowances for second and third children should be introduced since a family usually has one child whatever its financial standing. I think that this would help to raise the hirthrete in those areas where it has ceased to grow

It is not likely now to go much over 100 million. India has set itself the same goal of halving the birthrate. In France, where a low birthrate was having a negative effect, the government introduced family allowances and as a result was able to increase the rate Similar benefits have also been instituted in Huneary, Bulgaria, Yugoslavia and other

One Man's View

Let's put mama on the payroll!

by Victor Perevadentsey. M. Sc. (Economics) from "Literaturnava Gazeta"

It was not so long sen that all support themselves, their children parents thought of their childwould look after them

ren as security. When the parents Today this function of children is grew old and were no longer able to fast disappearing. The main source of income of the elderly is their pension, not material assistance from

16

their offspring. At the same time, the cost of bringing up children has increased. in spite of the fact that society bears a large share in the form of purseries. kindergartens, schools, hospitals, etc. Some 40 years ago, about 80 per cent of the population lived in rural areas. Today the majority are urban dwellers. At one time the boy on the farm became useful to his family at the age of 10 or 12. Today, on the average, urban children remain consumers until they are 20. In the past, money spent on bringing up children could be looked on as a type of loan to be renaid by the children when the parents grew old. Today this loan, ever increasing, is oftener not renaid. Rather it is repaid, and with interest, but to society as a whole

Of course the decision to have or not have children, and how many. is governed by many factors. But an important one is the economic mes-It would seem that since expenses

in raising a family have soored while returns are reaped by society as a whole, it would be only fair if society shouldered more of the cost. It is trite to say that raising children requires a lot of effort. Most of it falls on the woman. The working mother in fact, does her full shift at work and then puts in another five or six working hours at home

In raising children, the mother creates the basic wealth of society - the people who will produce all

material and cultural wealth. But this work so vital to society remains unnaid - it must be a unique case. In other words, mothers are the only ones who do not get paid for their work. From this it inevitably follows that large families are economically worse off than small ones

Although the Soviet Union pays grants to its large families involving colossal expenditure by the state, they no longer provide an incentive to raise more children, to my way of thinking. They are paid in the following proportions: for a third child there is a lump sum grant of 20 roubles: for a fourth the grant is 65 roubles and there is a monthly allowance of four roubles for next four years; for a fifth - an 85 rouble grant and a monthly six roubles: for a sixth child there is 100 roubles at birth and a monthly secen: for a seventh or eighth - 125 roubles and a monthly 10: for a ninth or 10th - 175 roubles and a monthly 12.50; for an 11th and any

Not infrequently, however, the greatest material difficulties are caused by the birth of the first child. Let us take a typical case. The newlywork earn 100 roubles each. As long as they are childless they can manage all right. But the baby arrives and after the paid maternity leave is up the young mother often finds that she cannot return to work immediately. Thus, where two lived on 200 roubles, three must now live on 100 roubles. It is not improbable that

the memory of such difficult times

subsequent child - 250 roubles and

a monthly 15.

is a deterrent to further experiments in procreation. Like all socially necessary labour,

child raising under socialism should be paid labour. The question is. where will the funds come from?

Many suggestions have been made Some have proposed that wages should be cut generally but increased for those who have children. Others have said that the tax on childless individuals should be raised. I don't believe these steps are practicable.

I believe the following to be more advisable: the rate of increase in waers and salaries should be slowed down and the principal method, or one of the principal methods, of raising living standards should be through pay for raising children. This should gradually be increased as the national income soes up. For a start, low income families should be first to receive benefits

It must be noted that increases in wages as a means of raising living standards were introduced after 1953. Before that, cuts in consumer prices were the main means used Cuts in consumer prices, rises in wages, pay for raising children - are all methods of raising living standards. It is obvious that the various methods affect different sections of the population. Pay for children will be of principal benefit to those who have several. Childless individuals or those who have only one child will "suffer"

From the point of view of the demographer, the value of the prothree sources of manpower in our posal is that economic factors will cease to hinder the hirthrate

It is also important to decide who should actually receive the cash Many experts think that the head

of the family should receive it in the form of higher earnings. I personally believe this would be

a mistake. It would mean introducing economic inequality for women. The pay should go to the one who does the work. In the vast majority of cases, to the mother.

Of course other consequences of such a step must be examined. Let us take one. Undoubtedly, the introduction of pay for raising children will lead to a decrease in the numher of women employed in the national economy. Can society afford this?

On the whole, the emergence of women into the labour force has had a profoundly progressive effect. I am convinced that a woman must work. But not at all periods of her

A rational approach would be that she should work before the birth of her first child and resume after her last grows up a bit. The length of this interval in her working life will largely depend on how well our service industries develop. The quality of services still leaves much to be desired

What would happen to our nationel economy if several million women left their jobs?

As an expert. I believe that all recent talk of a labour shortage in the Soviet Union is false. I can name

First, industry. Experts claim that

factories and enterprises are overstaffed by 25 to 30 per cent. By improving organisation of labour and supply — and the economic reform makes this possible — surplus workers in one factory or enterprise could be channelled into another where a

geranine shortage exists. Second, agriculture. Some 30 per cent of our work force is engaged in faming, whereas in a number of agriculturally self-sufficient countries the figure is between five and 10 per cent. While it is quite true that in cretain areas of the Russlan Federation there is a labour shortage on the farms, the Western Ukraine, Byelorussia. Moldavia, Transcencesia. Byelorussia. Moldavia, Transcencesia.

have large surpluses of farm work-

could be drawn on are the women and men who have gone on pension at the age of 55 and 60 respectively. Many of them are in good health and could carry on with their lobe

I am convinced that if the labour potential of the country was properly exploited, the national economy would not suffer if a few million women, who must spend so much of their time and energy on their children, were to leave their employ-

Moteover, society should pay them a wage for raising their children and consider their years at home part of their working life. They should be included in a woman's qualifying service for pension. This would be an important step in implementing factual equality between

A third source of manpower which men and women.

I am an art student aged 18. I wish to have pen-friends all over the world. My interests are drawn, poetry, philosophy, music, rughy and athleties. I can speak English and very little French.

Martin John Gajos, 35 Thompson Drive, Whitchurch, Shropshire, England

I would like to correspond with friends in different countries. I am 19 years old, can speak English, German, Russian and a little Franch. I collect view-eards. My interests are sports, mathematics and for-cins language.

Nedka Zaprianova,
"Tean Alexies" Street 16,
Starn Zapora, Bulgaria

I would very much like to have penfriends all over the world, expectally in
USA and Portugal. It know Portuguete

and a little English. Two Twages.

Ownsloo Gaebler Junior,
Cains postal 512,
Uniso de Vitoris, Perens,

I want to correspond with people in foreign lands. I am 14 years old. My hobbies are music and stamp collecting. Nature P. Shahi

are music and stamp collecting. Neets R. Shab, C/4/21, L.I.C. Colony, S.V. Road, Bombay 54, India

I am eager to correspond usith peoplefrom different connerties in English, coman and Bulgarian. I am interested in intex, promophone records, foreign languaget, sports, magazines, view-cards, national customs and folk mustle of all the national customs and folk mustle of all the national of the world I am an interpreter, 22 years of age. Vanko An, Salambanbey.

Stare Planine Str. 12A, ap. 3 Jambol, Bulgaria I would like to have pen-friends all over the world. My interests are literature, classical and pop music and postered collective. I am 20 and can write in English.

Esther Perls Orpians, 26 Malibim Str., Sikatuna Village, Queson Cav D-504, Philippines age is 14. I know English, Arabic and Bengali. My main interests are stomps and when cards collecting, radio, travel and firbing.

Q. Hassen Imam, Cadet No. 83,

Jhemidan Cadet College, P.O. Jhemidan, Dist. Jessore, East Pakhitan

I sount to make friends I could correspond with. I am interested in foreign languaget, booken, music, an: I also like collecting stamps, without and sound-mere personal sound sound-mere. Bessless Polish I know Rassian.

English, Spanish, Esperanto, and a listle Chinese, Tarkish, Hindi, Indonesian, Suabdil, Italian, Portuguese, Swedish, Czech and Serbo-Crost. Siswomir Oiszewski, Pulawska 38. m. 24.

Wasaw, Poland

I would like to correspond with girls
from Eastern Europe, I am 18 years old.
My interests are fullboars, cars, sailing, pop
music. I know French and English
Andre Branch

La Ferriere 22, France

I are 20 years old and I want to correspond with friends all over the world.
I are load of music, poetry, correspondence, travel and sports. Can write in Russian, Emplish and Bularian.

Zorka Ilieva Komitova, Radnevo — Starozagorski, Bulgazia I would like to base pen-friends every where and especially in Europe. I can

correspond in English, Arable and Hebrew. I am interested in reading, pop and folk music, stamp collecting. David Mazzawi, 311/10 Street, Nazareth,

I state!

I am 15 years old and my hobbies are fishing, hunting, stamp and record collec-

ting I speak only English
Anthony Duffy,
"Sweeney's", Kilinscanogue,

Co. Wicklow, Republic of Ireland

Oil Riches from the Arctic Ocean

from the newspaper Leninskasa Smena

According to Mikhail Kalinko, D.Sc. (Geology and Mineralogy), in an interview with a Nowsit Press Agency correspondent, the Arctic Ocean oil basin is likely to prove richer than any other in production of all and set.

Oil prospectors are already active in the region of the Arctic Ocean and although they have not yet penetrated the ice cover their work can be expected to yield rich results in 20 or 30 years.

It has often been said that if the extraction of oil and gas goes on at the same intensive rate: as over the same intensive rate: as over the past 40 years would resources will soon be exhausted, as output in that soon be exhausted, as output in that toos a year to more than 1,500 million toos. However, in view of the possibilities of sea-bed oil and gas extraction it would seem that this view is premature, as more and more deposits are being discovered, even in some areas where exploration in some areas where exploration

The bulk of oil and gas resources

beneath the seab-ed. Exploration of such deposits began as far back as the beginning of the last century and was first associated with the Caspian Sea where cill cutraction is being search to the countries, the USSR, the USA, Japan and canada, were extracting oil from under water but since then another O' countries have joined them and now the number of registered undercentury. Only four countries, the Caspian Coll is now cutracted by the USA.

are now believed to be concentrated

Oil is now extracted by the USA from the floor of Cook's Gulf, Alaska, and from the Mediterranean seabed by Italy. Britain obtains gas from the North Sea and Japan is going to double, if not treble, her output of undersea oil.

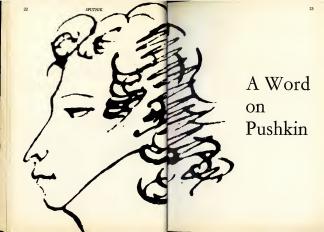
Geologically, the Arctic basin re-

sembles the Gulf of Mexico with its immense deposits of oil and eas, but territorially, it is much vaster. Descending into the seas which comprise it are the Pechora, West Siberian and Khatanga depressions, all of which promise to be very rich in oil. These depressions, together with the porth coast of America form the boundaties of the Arctic basin which constitutes one vast depression thought likely to contain incalculable reserves of oil and gas. This view is confirmed by reference to the 500 million-year geological evolution of the Arctic Ocean, easily traceable on

a map prepared by the Leningrad Research Institute of Arctic Geology. There have been frequent reports of oil indications on the Arctic scaboard, on many Soviet Arctic islands and from test bores on Spitzbergen and the islands of northern

Canada. Exploitation of Arctic oil will present many difficulties but they should not be exaggerated. It should be more practicable, for instance, than in the swamps of the West Sibetian lowlands, of which Soviet oilmen have great hones. The permafrost facilitates the drilling of bores and transportation while the North. ern Sea Route will make it possible to deliver oil and sas to all parts of the world. Weather conditions and the depth of the sea should not present obstacles as underwater oilmen elsewhere are already working at depths exceeding 300 ft. Fullscale automation of drilling and extraction will open the way to the development of deposits on the sea bottom, beneath the mass of water

and ice



June 6, 1969, marked the 170th anniversary of the birth of the noet. Alexander Pushkin (1799-1837). To celebrate the occasion, we present excerpts from two articles dedicated to Pushkin's work by the well-

poems by Pushkin.

For one who has, even in the most modest fashion, something to do with the world of poerry, it is perhaps even more difficult to write of the man whose genius has given this art eternal power over the hearts of men. How terrifying to pen an untrue word, particularly as so many beautiful words, worthy of his name and deeds, have been expressed by all those who together with him have created the world-wide fame of Russian literature

Each one of us possesses his own Pushkin- for each of us he remains unique. He enters our lives at the very beginning, not to forsake us till the end.

I discovered and became enamouted of Pushkin at that age when it is sweeter to listen to reading than to read. From the snoken word I knew his Tale of Tsar Saltan: The Battle of Poltava, from Poltava: Tatiana's Dream, from Eusene Onesin: The Bridegroom, But the Captain's Daughter was the very first book in my life that I read on my own. I can remember the cover, the smell of the book: I can remember how overjoved I was that I myself had discovered this hitherto unfamiliar sto-

I was caught up by the tale and sat reading by my window, oblivious known Soviet poet, Alexander Tyarto the world, until it grew dark. I had reached the section describing dovsky. We also publish several the blizzard in the Orenburg steppe. and when I looked up I saw that outside snow was falling. To this day it has remained an indelible impression, as though of a magic spell emanating from the pages of Pushkin. From that day on I become a reader, and I feel infinitely grateful that I am indebted for this to Pushkin. And who is not indebted to him for the joy of discovery, at the very dawn of one's thinking existence, of a source from which one will drink all one's life! But if Pushkin comes to us in childhood, we come to him in reality only with the years.

> For a lone time I presumptuously imagined that I knew Pushkin. After all. I had read and reread him in childhood and adolescence, I had "studied" him according to all the rules of university literature courses. I had read a considerable number of books and articles about him. I had long discussions with my friends about him, in which I flourished sharp insights into aspects of his mastery. What more could be expected?

But it was only in the days of the war, or rending grief for one's native lend, in that grim maturity which came to us in face of the terrible threat to everything held dear, that I, along with many others of my peneration, I expect, realized that until then I had not known Pushkin.

suddenly comprehended, to the deaths of my being, the incomparable power of Pushkin's word. As though heard for the first time, as though totally unfamiliar until then. lines of proud dignity from his patriotic lyrical poetry rang in my ear. With the delight of startled comprebension I acquired the world of noble beauty immortalised in this worn, slim volume I carried with me through the war - a world of impressions, thoughts and feelings of my native landscapes, my homeland with its towns and villages. fields and waters, its hoary past and songs and lavs. And all this had meaning for my time: delight came not from indivi-

dual brilliant lines, but because it all evoked my native land, all of it was my inalienable heritage, my pride and honour, faith and glory and there was no power on earth which could take it away from me. There are few masters of the

written word with whom the reader feels so free and easy, so friendly and trusting, as with Pushkin, and even those few owe something of their power over the reader to the "founder" of our literature.

The reader who communes with Pushkin experiences the simple humanity of the man and never feels

overwhelmed by the nearness of genius. Such was the bright, humanistic oenins of Pushkin expressing itself in the image of a harmonique. clear personality.

Vissarion Belinsky, the nineteenth century literary critic, wrote that Pushkin belonged to the category of immortal phenomena perpetually in motion, which do not remain at the point death catches them, but continue to develop in the consciousness of society. In the period of more than a

century which has elapsed since his death, Pushkin, of course, has gained in significance in people's minds as they have discovered more and more facets of his genius. Then, too, in Pushkin's lifetime not only the number of the reading public, but the population as a whole, was infinitely smaller than it is today, not to mention that Pushkin's name and works have long since crossed the frontiers of his native land All of Pushkin, the whole immen-

sity of his historical development, is inseparably entwined with the major historical moments in the life of our people

Pushkin was part of the spiritual uplift which followed the victory of the people against Napoleon in 1812 Chapter after chapter of nineteenth and early twentieth century history reveal the ever-oreater and more important role that Pushkin played in the life of the people, in the growing struggle of opposing classes at different stages of the development of society right up to the eye of the October Revolution.

Pushkin --- the poet of freedom, the accuser of tyranny, the ereat patriot, the proclaimer of a bright future for the whole people - was with us in our movement toward that future. And this gave ever greater significance to his immortal crea-

tions

Still be was not yet that Pushkin whom we learned to know and respond to with the coming of the new era, the triumph of the Great October Socialist Revolution, the introduction of the great mass of the people to culture and an active intellectual life, a fantastic growth of interest in the works of the genius. the mass publication of his works and the development of Soviet studies of Pushkin Turreney in his time, cautiously

and with reservations, called Pushkin a national poet and underlined the difference between this term and the term "people's noet".

"But what great poet," be said, "is read by those we call the common people? The common people of Germany do not read Goethe, or the French Molière, and even the English do not read Shakespeare."

Western writers put forward similar opinions "That noetry should be accessible

to millions? Never has been and never will be "

But we believe that it is not only possible, ideally it can only be so:

real poerry must be within reach of millions. We believe the contradiction between the national significance of poetry and its inaccessibility to the mass readership of that nation to be a passing, dving phenomenon. Such "majesty", a majesty hemmed in by a narrow circle of admirers and connoisseurs, is incomplete and unfulfilled.

The historical fate of Pushkin's

poetry incontrovertibly sustains our conviction. Such unfulfilled majesty is a thing of the past for Pushkin In our Soviet age, Pushkin has become what he was intended to be by history. He is the founder and source of a literature, the world significance of which has long been unquestioned and entrenched. He is an artist whose creative genius is acknowledged even by foes. Today he is the most read, popular and beloved poet of a great, multinational country, which is an example of the merging of one of the neaks of cul-

tural achievement with socialism

and communism

Time selects the indestructible golden treasury of Pushkin's verse. though it is not easy to enumerate. After all, it numbers not only Eugene Onegin, Boris Godunov, and Bronze In our own day I have heard Horseman, masterpieces of love and philosophical lyrics, short tragedies, fairy tales. Captain's Daughter and other prose works, but also includes critical essays, travel notes, a historical sketch and God knows what else, not excluding some brilliant examples of the epistolary genre.

And all this wealth has reached us intact, without losing any of its live, triumphant power.

This power - the lofty and pure power of his poetry, the humanism of his thoughts and feelings, by right has now been inherited by the bu-

manism of socialism Lines learned at the school desk and repeated a thousand times renum to one's thoughts cloaked in disturbing novelty and ring with their initial fullness of meaning: "And in long years to come the

nation will remember

How virtuous sentiments I with my lyre awoke. How in a cruel age I sang in praise of freedom

And mercy on the fallen spoke," The "cruel age" has not yet depar-

ted from our planet. Perhaps it is even more refined in its inhumanity than in Pushkin's day. In any case, it is equipped with much more powerful and monstrous masse of expressing its cruelty. And perhaps never before did the simple combination of words "virtuous sentiments" mean so much or find such comprehension as in our age of strategle between "virtuous sentiments" and the inhuman

We cannot but know that cruelty and violence and barbarism and hatred for man - by a strange necessity - attempt to pass themselves off as something "heroic", "romantic". They too wish to appear in the colours, sounds and words of arr and

poetry.

Just as egoism, and spiritual decay, self-interest and low unimality would like to appear before the world in the form of an art particularly complex, incomprehensible to all but a chosen few. like the most precious

essence of things. There is no place for these in the limpid, poble, courageous and humanistic poetry of Pushkin, Rather, it is the hest antidote to the povious anti-humanitarian trends exhibited by some exponents of contemporary art who call themselves ultra-realistic. It heals and teaches health of mind, clarity of view and that "exalted sobriety of mind" of which Goeol wrote, reflecting on the essence of Russian poetry. There is no peed for us to foist

onto Pushkin's poetry a communist content or to seek out those scattered ideological meanings which coincide with our outlook and understanding. We have got over and left behind us that period when his heroes were criticised because of their incompatibility with the concepts of the present revolutionary period. Pushkin came to us and has been accepted by the people as he is, in the organic whole of his poetry. The realism of Russian literature.

which was fated for such a great historical destiny, began with Pushkin. It is as though he encompassed in himself all the realism of the Russian people's outlook on life, their "colourful manner of expression and cheerful craftiness of mind" to use the poet's own words.

28 To K ***

Shall I forget that wond'rous moment When first thou didst appear to me? -A vision fleeting and resplendent, A foretaste of divinity.

Despite the sorrows that oppressed me, The tumult of this earthly race. Thy gentle voice for long obsessed me. And I was haunted by thy face.

The years advanced. Storms of rebellion Shattered old dreams of gods and men. No longer then thy voice resounded. Nor did thine image haunt me then.

Condemned to far incarceration Tediously I told the years. Bereft of God and inspiration Bereft of life and love and tears. But with my fainting soul's rensscence Again thou didst appear to me,

A vision fleeting and resplendent. A foretaste of divinity My heart was filled with adoration. Banishing the anguish and the fears, And God was mine, and inspiration Life and love and even tears

1825

Drinking Song

Why hath the merriment ceased? Lift the inebriate voice! Hail to the wives of our choice And the beautiful damsels adorning our feast! Fill the goblets to brimming! Into them fline A wedding ring

And pledge the betrothal with hymning! Raise high your glasses! Abstention is treason! Hail to the Muses! Hail to Reason!

Burn ever brighter, oh Sun! As the light of the lamp is eclipsed and erased When thy glorious day is begun, So the sickly illusions of mind are replaced When irradiant Reason, pierces the night. Vanish, ob Darkness! Hail to the Light!

1825

The Prophet

By anouish of the spirit torn,

Into the wilderness I fled. And there among the wastes forlorn A six-winged Scraph raised his head. With fingers fragile as a dream He touched mine eyes and made them gleam As gleams the eye when it absorbs The light through fear-dilated orbs. He touched mine ears, and suddenly I heard the monsters in the sea, The shudder of the nether sky. The beating of an angel's wings, The song the grass in growing sings, And all of nature's harmony. He touched my lips, and then my tongue From out my sinful mouth be wrung. He took a serpent's forkéd fang With wisdom dripping from the tips He pressed it to my bloodless lips, And through my veins the liquid sprang-My breast he cleaved with his sword And ripped my heart from out its bed; Into the gaping wound he poured A stream of fire. I, as dead Fell prostrate on the sands and lay Until I heard my Maker say 'Hearken, oh Prophet, and obey!

1826

The Nightingale and the Rose

At nightfall, in a silent earden, odorous with spring. An Orient nightingale unto the rose doth sing. His carollines no runture in the rose arouse Unbeeding and unfeeling, she sinkerh to a drowse. Are not thy rhapsodies to beauty just as vain? If cold thy mistress, Poet, what can singing gain? She heedeth not, she heareth not the poet: A look she may youchsafe; ber grace - she'll not bestow it.

1827

Selected passage from the novel in verse. EUGENÉ ONEGIN

(The death of Lensky)

Still and stark upon the snow he lay. A languorous serenity upon his brow: Straight to his heart the lead had made its way. Now steaming blood from out the wound did flow So soon before so sudden a cessation This heart had beat with inspiration. Enmity, hope, love and strife: This blood had sureed with plenitude of life. Now, like a house uncannily deserted. All within is dark and still. Shutters are shut: windows chalked. To white and staring eyes converted Gone is the master. To what new place? God slone knows. Gone without a trace.

1823_31

Translated from the Russian by Margaret Wattlin

Where

Was

vests ago!

the "Cradle of Mankind"?

31

from the magazine "Vokrug Sveta" (Around the World) Explorations along the canyon of the River Raudan near Yerevan, capital of Soviet Armenia, have revealed caves that were inhabited by Palacolithic man - 60,000

Ever since Darwin, scientists have been trying to establish the site of Man's origin. Today it still remains an open question. Some believe that Man's divergence from the general anthropoid stem took place somewhere in the area of western Europe, others that it took place in northern Africa, and still others - in couthern Asia But no evidence so for discovered has werranted a final conclusion.

However, more and more areas of the world which provide traces of early man are being explored. "Perhaps one such site was found

by our expedition". Dr. A. Martirosyan, who headed the group, told Vokruz Sveta

"The aim of the expedition mounted by the Armenian Academy of Sciences was to investigate caves in the Armenian highlands. On the face of the mountains which close in on Lake Sevan we discovered a huge number of hitherto unknown rock drawings depicting scenes of hunting, ritual dances and ceremo-

nies, drawings of the sun, planets, dragons, snake-fighters . . . Martimevan went on to say that

though the drawings could be dated to the Iron, Bronze and Neolithic cultures and were extremely interesting because of the vast fund of information they provided about those eras, the most thrilling discovery made was in a cave by the River Raudan

In a trial dig that went down to about seven feet in places the team found nearly 2.000 whole artifacts and another 4,000 incomplete ones dating back to the middle and later Palaeolithic era. Even the so-called "classical" Old Stone Age excavations which have given their names to whole periods of the age have

not vielded such a wealth of objects. As only the top layer has so far been investigated, there is every reason to believe that further dies will uncover the remains of early Palaeolithic man and - who knows? - perhaps the caves of Armenia will someday yield the secrets of the "cradle of mon"



A photograph from the erchives.

I. Maskevin as Luke and M. Savitskeya as Amas in a production of Gorky's "The Lones Depth" at the Mascono Art Theatre in 1902. This production wanked a recolution in theatre—the

The "Stanislavsky Method" or simply "method acting" have become commonplace terms in London, Paris, New York or Buenos Aires. But it all began 70 years ago when the curtain first went up at the Moscow Art Theatre.

The founders, Konstantin Stanislavsky and Vladimir Nemirovich-Danchenko, had started on a road that was to revolutionise theatre art the world over. Habitual theatre conventions and traditions went toppling; a bold, innovatory repertoire was created and innumerable experiments conducted. In the course of their searchings, Stanislavsky and Nemirovich-Danchenko worked out new principles of stage directing and elaborated a now universally recognised theory of realistic acting.



The first time I saw a production at the Morour Art Theatre was in 1933. I had come from Italia in code to apply for admission to a theatre school. I was young, in love with the theatre and my nind was filled to the brim with theatre events, theatre novelties and leftist ideas. I dreamed of Meyerhold's theatre, of Tairov's. Naturally I intended

to pay a visit to the Art Theatre as well, but merely for the sake of broadening my horizons.

I had never been to the Art Theatre, but I was quite convinced it, had outlived its day. It was stagnant, overnaturalistic, outside the trends of contemporary theatre. Such was the strength of current opinion, prevalent

among youth.

The first play I saw at the Art st
Theatre was "Days of the Turbins",
by Mikhail Bulgakov. I was overwhelmed. The emotional shock I
received then has lasted for 35 co
years, there is no crusing it, even
though since then I have seen so or

many stage performances...

A few opening lines are spoken and suddenly the stage is plunged into impenetrable distlness (the action of the play takes place during the Civil War and the power is cut). In the darkness on stage, life goes on — somebody demands matches.

others talk in agitated voices.

I had the feeling that the dark of that uncertain night had engulfed the audience and that everyone present identified with the actors on stage. In other words, we had been transported to the Kiev of 1919.

We all felt cold, uncomfortable upset. It is difficult to express the

It was a miracle of art (like an miracle, it cannot be explainfully). There was the feeling the you were part of what was happe-

ing on stage.

One might say: you were youn, impressionable, it was the first playou saw at the Moscow Art Thest. But no! Later I saw the play I more times. And each time the miracle was reenacted. It had no thing to do with a first impression I I was a harmony of the whole an the creation of a contact with audience, which is possible only it to the theatter and which is essential.

in the theatre. The Moscow An Theatre knew the art of making such contact.

That is how I became a convince

"method" adherent in the sheater.
As time went on I began to discern "method" principles at work is
beaters which followed quite diffee
ent lines. These principles appears
on ea the destillation of man'
still do, the untranmelled fannay
still do, the untranmelled fannay
steatifically, ingeniousness and experimentation of Meyerhold. I have
benefitted greatly from the rational
picturesque and poetic theater of
larger, Revertheless, I could see
These the state of the state of the state of the state of
larger and the state of the state of the state of
larger and larger and larger
larger
larger and larger

these as well.

Details of human existence, the culmination of man's spiritual life on stage became of the utmot im-

portance to me.

I remember once seeing a semi-

The Moscow Art Theatre discovered Mishad Bulgakov as a playwright. Its production of his "Days of the Turbins" was "a wiracle of art", says Georgi Tosstonogos, Jamous stage director.



The three sisters in Chekhon's play. Chapling's name is closely associated with the Art Theatre, and the very first

A scene from Schiller's "Marie Stuart". with Oueen Elizabeth holding court. This is one of the comparatively few



concert performance of "Hamlet" given by a small travelling company. They followed a romantic style of presentation, redolent of nineteenth-century romanticism before the impact of Stanislavsky's ideas. But when the actor, according to all the rules of such theatre, took the precise centre of the stage to address the andience and when two large tears slowly coursed down his absolutely impassive face and then be intoned - "To be or not to be" - a shudder ran through the audience. That was a moment which be-

longed to the Moscow Art Theatre. And so it goes on. I experience such moments in different theatres. in different countries. They are miracles of art that would have been impossible without the birth, 70 years ago, of that unique theatre, Even though (this is natural), the creators of such moments may not consider themselves disciples of Stanislavsky and Nemirovich-Danchenko

An analogous situation exists in poetry. There is a multitude of poets of different schools different trends. The subjective vision of the poet is oranted. The poet feels, and must feel, incidentally, that he is completely independent in the pattern of his thought, in his manner of expression or as is said, "self-expression" But at the same time it is quite obvious that if at the beginning of the last century there had been no Pushkin, then no poet writing today would express himself as he does.

The same is true of the Moscow

Lenin (A. N. Gribos), the "dreamer in the Kremlin", talks to H. G. Wells (A. N. Ktoros) in the Art Theatre production of Nikolai Pogodin's "The Kremlin Chinese"



Art Theatre principles on the stage.

Just as every Russian poet, on
maturing, discovers as if thunderstruck, his affinity to and relationship with Pushkin, any real actor
or director, I am sure, at some time
suddenly discovers his relationship

with Stanislavsky.

I cutch myself waiting for such moments as I watch plays in any theatre and I fell thrilled when they come. When I saw Ernst Basch in Callton, a classical Brecht protection of the same and the same an

Albert Einstein spent the greater part of his life trying to devise what he called a "unified field theory." Physicists are not sure it can be done at all. But the theater. I be done at all. But the theater. I be leve, has its "unified field", its overall underlying principles. That 'unified field' of tension in the additional is constituted by the additional is constituted by the field of the state of th



Population, Food and the "Third World"

by Alexei Levkovsky, Doctor of Fernamics

from the journal "Voorcey Filosofii" (Questions of Philosophy)

Dublications, both scholarly and popular, are increasinely often dramatising the fact that a shortage of food keeps hundreds of millions constantly undernourished and that hunger is threatening to sween the entire world. This is not sensation. alism: these expressions of alarm refleet setual, and most contradictory. processes taking place in the world today. At the same time, the prolonged and intense ideological dispute over the population-and-food problem reveals a difference of views on its essence and ways to achieve a radical solution. In the final analysis, this problem offers a battleground for various conflicting

interests All of which gives added importance to a knowledge of the actual state of affairs and of the laws of development governing these processes. Needless to say, the key fac tors behind population changes of natural and social. Man lives, pre duces and consumes as a memb of society, so there is no writing of the conditions of his social environ ment More: the social factor is the dominant one. But if it is divorced from the natural factor oversimpli fication may result.

The transitional state of the social order in the world confuses t population-and-food problem. This problem cannot be interpreted correctly outside some of the basic so cial phenomena which still warrant closer investigation. The point that the majority of mankind liver in what is known as the "thin world". Its social and econom multiformity offers a clue to the

cesses in the developing nations, ineluding the ones we propose to dis-Population Explosion

cuss.

The world's population is rapidly expanding. In 1920 it was about 1 900 million. In 1960 the figure rose to 3,000 million and by the year 2000 it is likely to top 6.000 million. By 2050 it will reach 11 000 million and later in the 21st century will hit 15,000 million. No wonder this expansion, with its attendant problems, is often referred to as "the population explosion".

Every explosion has an enjoyntre From the 1920s to the 1960s the population of economically advanced nations sourced from 674 million to 976 million, Toward 2000 the figure should reach 1 500 million What are now known as the developing countries have in the same four decades recorded a population growth from 1.187 million to 2.022 million and by 2000 will reach close to 4.700 million. Avenage estimates out the mid-21st century population of the advanced nations at 2,000 million and that of the developing countries at 9,000 million. At the end of the next century from 80 per cent to 90 per cent of the predicted 15,000 million population should fall to the share of what is now the "third world".

Forecasts agree that the epicentre of this population explosion is (and will long remain) in the "third world". The rate of population growth there is double that of the economically advanced parts of the world. In the 1965-80 period it should amount to 2.58 per cent in the developing countries and 1.13

per cent in the advanced nations. Before the 1940s mass epidemics and famines led to an absolute decrease of the population in several large countries in Asia, Africa and South America. Ruthless exploitation of oppressed nations produced an important protective change in the law of population growth in those countries: the large family became a quarantee of preservation of the labour force, a source of social security for the elderly and a vehicle

The postwar removal or restriction of the political rule of foreign capital has drastically improved the internal social situation in the countries in question and made possible an extensive application of the world's medical scientific and techpological advances. As a result, the mechanism of population changes suddenly began to operate in conditions in which the baneful effect of colonialism on people's life had grown substantially weaker. The protective reaction (large families) which over many decades had been sanctified by national and religious customs and institutions, was suddenly much stronger than the weakened social barriers it had to surmount. That is why the current population explosion in the "third world" is an inevitable consequence of the long colonial oppression which deformed natural social evoThe rapid drop in the mortality rate as a result of medical and scientific advances is not accompanied by a corresponding reduction in the birthrate. In the next few decades the gap between birth-death ratios in the advanced and the developing

countries is likely to widen The result is politically important distinctions in the age structure of the population, which are likely to linger. The bulk of the "third world" population is growing progressively vounger. The relationship between these two groups of nations has become, figuratively speaking, much like the relationship between youth and middle-age. For a certain period this situation creates grave difficulties for the "third world" the proportion of those unable to work has become very large, Compared to the advanced countries. where for every 100 able-bodied members of the population there are 57 unable to work, in the "third world" the ratio is 100 : 85.

Apart from the spp in Jospulation growth rates in the absenced and developing nations there are differences in economic and social shifts within the population. The developing countries record an absolute rise in the number of farm workers. It was 781 million (65 per cent) of their total population (excluding China) in 1950 and 1,075 million

(64 per cent) in 1965.

The same period showed an intensive absolute drop (from 242 million to 186 million) and a particularly intensive relative drop (from 33 per cent to 21 per cent) in the

ranks of the farming population of the advanced countries. Thus, the population of the developing nation population of the developing nation is predominantly rural and that the the advanced, predominantly urban

Food Shortage

From 1954-55 to 1964-65 the world's food output soared 30 per cent and population grew by 22 per cent. On the surface, the situation does not appear alarming.

However, a global approach the food problem in our divided world demands a study of the spe cific features of the situation in in dividual areas. In the advanced and the developing nations the food production index rises almost equally or even with the latter leading. In the advanced countries the 1962 1966 index reached 134 and in the developing ones 136 (the 1952-56 index being taken as 100). A per capita food output would offer an entirely different picture, for the "third world's" population has expanded. In the economically ad vanced countries this index rose to 117 in the same period, while in the developing countries it soared at the end of the 1950s to 106.

stabilised, and in 1965-66 sank to the level of 1956

Thus, food production in the conomically advanced nations outstrips population growth. In the future overproduction of food may pose a greater threat than lack of food. Meanwhile the "third world" faces an alarming situation. It has a wast potential of farm resources; in the middle 1960 it was calities. ting 2,813 million acres while the economically advanced nations farmed 2,542 million acres. In Asia the ratio of cultivated area to total arbite resources is 63 per cent, in Africa 29 per cent and in Latin America 19 per cent, in Europe, excluding the USSR, it is 63 per cent and in North America 30 ner

A vital key to understanding the opposite economic and technological spends at work in the two economically different groups of countries is the size of rural population per unit of cultivated arable land, In 1960 -64 the per capita average in Asia was 2.95 acres, in Africa 11.75 acres, in Latin America 12.5 acres, in Furnne (excluding the USSR) 6 acres and in North America 78.75 acres. Present-day intensification of soriculture requires (and generates) a drop in number of workers per acre. In the "third world" the swelling farm population upavoid. ably builds up the pressure on land

any pusies up the pressure on land (Lee, more people per unit of land.). The immense lack of modern farm. The immense lack of modern farm. The control of th

about five pounds per acre, and in

the advanced countries, 32.2 million metric tons, or about 44 pounds per acre. Adverse technical and economic factors coupled with adverse social factors lead to lower crop yields and labour productivity. Estimates for the late 1950s say that the productivity of the aericultural worker (Italy, 100) equalled 25 in India 21 in Thailand, 33 in Algeria, 286 in the United States, 199 in Canada and 228 in Holland, Consequently the individual farmer's work in the developing countries mentioned here is only an eighth or a tenth as productive as it is in the advanced.

Unproductive systems in agriculture increasingly fail to ensure a sufficiency of consumer foodstuffs and raw materials for other spheres of the economy. At the same time they prevent a radical surge of the productive forces in agriculture itself and absorption of the vast amount of surplus labour. Only diversification of the economy, eventually leading to industrialisation on the scale and in the forms required by each country, is capable of removing these difficulties. But such diversification requires corresponding quantities of marketable foodstuffs, skilled labour, investments etc. Nothing short of radical social and political measures can cut this

vicious circle. Per Capita Food Consumption

A slow growth, or a slump in per capita food production has an extremely harsh effect — the "capita" gets very little. The economically advanced nations record a rela-

tively high per capita food consumption. Just before the 1960s they registered 3,050 calories per person as against 2,150 in the "third world". Diet pattern also differes sharply: in the economically advanced countries products of animal origin account for 880 calories; in the developing nations, for only 180 The diet in the "third world" is insufficient, monotonous, has a low nutritive value and is poor in proteins (lack of meat, milk, butter, fish, etc.).

We are witnessing the first stage of a mounting food crisis in the "third world" - its countries are working painfully to achieve the minimum necessary level of nourishment, mostly quantitative, with a rising consumption of vegetables So far, meat remains a luxury. And still the need for meat products, particularly in view of the rise in the number of people engaged in high-productivity socio-economic forms of occupation (mostly urban), going up. Already, elements of a second stage of the crisis are ripening, a stage at which there arises a need for a qualitative change in diet. In the immediate future is may generate a need for large-scale imports of meat, eggs, dairy products and other items (it is anticipated that in 1975 grain will comprise less than half of food imports). The mass production of these commodities in the developing countries requires a drastic change and the intensification of their agricultures. Without doubt, given a predominance of unproductive forms, these

goals are unattainable. That pre-

as they already are. production and demand in the "thing ges and tobacco, in absolute indices, world" is widening markedly. As result, more and more food has a be imported. The cost of importal ing to 32.7 per cent and 28.6 per shoots upward. But even if this food cent of total exports respectively, is imported the per capita calorie consumption will rise by no more than about six to 11 calories a days that means that the mass of the people will remain undernourished: I is estimated that normalisation of this situation will take at least 15 years, and then only if the eros

national output rises by at least

5.5-6.0 per cent annually.

According to tentative long-term estimates of the United Nations Food and Agricultural Organisation. the developing countries will by the year 2000 be consuming 2.450 calories per capita. To reach that level. their entire food production must quadruple and the output of animal products soar to 5.83 times the 1957-59 level. Only in the mid-21st century, FAO experts say, will the developing countries approach the advanced in terms of calorie intake (3,100 as against 3,300) while consuming, as before, only half the proportion of animal products (600) and 1,200 calories a day respec-

Contradiction in Food Imports A growing number of developing nations are finding themselves in a tragically paradoxical situation. Predeveloping countries. At the same

tively).

duces another tangle of social con dominantly exporters of farm proflicts in the "third world", involved duce, they are rapidly becoming its major importers. From 1955 to 1965 At present the gap between food, the export of food, including beveragrew from 7,680 million dollars to 10,370 million dollars, correspondwhile imports of food rose from 3.550 million dollars to 5.890 million dollars (or from 16.3 per cent to 17 per cent of the total imports). Food imports are growing faster (5.2 per cent annually) than exports (3 per cent).

Already some 40 developing nations are 100 per cent importers of food In terms of cost total food imports rose from 4.330 million dollars in 1958 to 5,880 million

dollars in 1965. Due to lack of foreign currency they find it impossible to buy all the food they consume on the usual commercial terms. On the other hand, we have huge resources of food in some Western countries. This situation has generated a contradictory system of large-scale food deliveries to a series of developing countries on favourable terms For the developing nations the

influx of large-scale food deliveries has produced a tangle of socially positive and negative consequences, Without question, the foreign deliveries of foods, even if they are the simplest food staples, have relieved the food shortage and saved part of the resources vital to other areas of the national economies of the

time, the Western powers have obtained important economic and political levers which they have used to support social and economic tendencies that served their interests, and to put a brake on those which did not. Some local currency obtained by the sale of Western foods was immediately credited to selected companies in that particular country. Large sums were used in one form or another to bribe or subsidise favoured individuals and organizations. Another series of negative consequences for the recipient countries stemmed from the fact that the foreign deliveries of grain over many vears seriously affected social and economic processes in their countryside. Pressure that would eventually force changes in outdated forms of agriculture and land-usage was relieved for a period. The influx of cheap foreign grain hindered the cultivation of the same crops at home and affected adversely great masses of the peasant population. Consequently, at a time of acute food shortage it was to a certain extent disadvantageous (due to the low prices) to expand grain production. Only the magnitude of the food crisis - an obviously negative factor - overcomes, and only gradnally the effect of that contradio tion. Thus, aid that is incorrectly given does great harm to the interests of the recipient country.

According to many Western exnerts, the massive US foreign food deliveries under the PL 480 Act were a by-product of US domestic policy. By this means the United States succeeded in selling to political and economic advantage the surpluses it had falled to sell at home. The storage of these surpluses was expensive, had gravely affected the domestic food market and prevented Big Business from keeping prices sofficiently high. Us stocks of wheat, which had grown from seven million roots in 1922 to food to the selling of the selling of the food of the selling of the selling of the darket of the selling of the selling of the line of the selling of the selling of the line of the selling of the selling of the line of the selling of the selling of the line of the selling of t

foreign commercial demand. In the new situation the US ruling circles hurried to introduce, with effect from January 1967, new legislation concerning food deliveries shroad. After a transitional period (from the end of 1971) such deliveries are to be paid for in hard currency. Now that foreign currency is becoming increasingly difficult to the developing countries are facility to the control of the food problem.

nearly enough to meet the usual

The food crisis mainly affects the "third world", but it can be overcome by the joint efforts of all states. It is an international problem. Increasingly anxious about the food situation in the developing countries, expetts point to the threatening consequences of the simultaneous action of the following factors:

 on the whole, food production in the developing countries is expanding slower than the demand;
 their potential easily cultivable acreage has sharply decreased; their populations are multiplying very fast; 4) aid from the advances nations has not increased; 5) their debts are soaring.

Unable to build up new foreigner conomic relations, the capitalis powers have to look for makeshirt To retain the spheers of activities a To retain the spheers of activities a Company of the Company of the Company to the Western powers are resorting to methods that are not usual for them, and are even downright aliastem, and are seen downright and are aliasted to the company of the seen and the company of the c

of capitalism today, however, per

odically explodes its own method

of foreign economic policy (an ex-

ample is the abrogation of Act P

480). Another indication is the now only six per cent of the total aid and 15 per cent of the technical aid from official sources go into agriculture. For the developing countries the population-and-food problem in volves, above all, the gradual and realistic replanting of their small scale commodity and small-scale commodity and small-scale prilatist ferms of farming. Ways of

volves, above all, the gradual are realistic replanting of their small scale commodity and small-scale commodity and small-scale conpitalist ferams of farming. Ways of tackling that most involved problem differ fundamentally from the class point of view. However, as evindenced by the history of the economically advanced nations and the experience of the developing states themselves, if such a complete control on the view of the companion of the comserved of the companion of the comserved of the companion of the companion of the comserved of the companion of the comserved of the companion of the comserved of the comton of the comsources alone, and if their private expitalist forms and the political power of the richer sections of their population are allowed to survive, the result will be the long drawnout and painful birth of capitalist

industry.

The imperialist monopolies are slowing down, objectively and subjectively, the essential replanning of the existing socio-economic forms in the developing countries thereby cripoling the healthy evolution of

their productive forces and production relations. This is their major negative, reactionary effect on the socio-economic development of the "third world": millions of people are being left without work and

food.

To sum up: from the economic relations between the two economically different groups of countries follows an added objective argument in favour of socialism and planned economy on a world scale.



1966

"T'he world's largest blast furnace was put into operation near Krivoi Rog in the Soviet Union in 1967. It can turn out some two million tons of pig iron a year, almost half the production of all blast furnaces in Russia at the beginning of the First World War.

It takes about 150,000 workers. the population of a medium-sized town, to handle the pig iron this giant produces. But the furnace itself is operated by barely more than a hundred men. It is automated, which is nothing unusual in our day: but bear in mind that this 25-storey fire-breathing volcano consumes 60-ton carloads of ore and coke at the rate of over 200 a day. Its maw could house a concert hall, Yet the whole is run from one control centre. An electronic computer receives signals from 500 transducers - thermometers, pyrometers, pressure gauges, consumption meters and other instruments installed all over the blast furnace. When required, the computer modifies the

smelting conditions Every three hours 600 tons of molten pig iron is poured into great travelling ladles, which carry it to

the steel smelting shops. To protect its walls from the heat,

3,500,000 cubic feet of water daily run through the cooling jacket of this fiery furnace - enough water to supply a population of 250,000. The slag is turned into granules a valuable building material for the

Are blast furnaces of this size really necessary? Yes, indeed. This latest furnace has an effective capacity of 94,500 cubic feet, as compared with 88,750 cubic feet previous record capacity of a blast furnace first blown in Japan in February

Ten years ago, the biggest blast furnace in the Soviet Union had a capacity of 52,500 cubic feet: 100 years ago, the capacity of the biggest blast furnace in the world was only 8 750 cubic feet

Until quite recently many specialists believed that it was inexpedient. even dangerous, to go on increasing the size of blast furnaces. But three years ago the USSR built an 80,500 cubic feet blast furnace - another record at the time - and it proved to be more efficient than the smaller ones. It is still working satisfactorily. The Krivoi Rog giant is even more efficient: it produces the cheapest pig iron in the Soviet Union.

The Murderer

by Grigori Gorin. from the magazine "Yungst"

rzirvusha Lapenkov, a beanpole of a man, sat dining in the dietetic canteen. He was in a filthy mood, a grim mood,

Why should anyone be in radiant high spirits if he has gastritis and is sitting in a stuffy canteen eating a 43-kopeck lunch; soup with grated vegetables, steamed rissoles with mashed potatoes, and white flabby blancmange. What kind of thoughts could such food stimulate in the

Only dark thoughts. Grated thoughts. Steamed ones, Flabby, jellied thoughts. Unsalted ones.

But Lapenkov's constitution revolted. At the very moment when his stomach was apathetically accepting the insipid slop within its walls. his brain was seized with furious activity. It was as if galvanized, producing pungent, salty, succulent thoughts, well-seasoned with pepper and oriental berbs, piquant, sizzling thoughts, like skewered shashlik over red-hor charcoal

A brief outline of those thoughts: 1. The cook's a bastard, Grate the vegetables, O.K. But don't make a mush of them. Sits there and tucks into curried mutton himself.

2. The local doctor's an incompetent fool. If he finds a man's got eastritis, why doesn't be treat it! All he does is put me on this lousy diet. And they've just given those marks a rise!

3. The trade union branch chairman's a right so-and-so. Won't give me a voucher for a free rest-cure in the Caucasus. "Comrade Lapenkov", he says, "you've only got gastritis. We've got blokes in the branch with ulcers". What a pain in the neck! Not going to vote for him

next time. Sign of protest.

4. Korolkov, the departmental chief. Stinking bureauerat. Squeaky voice like an old woman. "Comrade Lapenkov", he says to me, "why lawent you sent off an enquiry about the transformers to Kerch?" "Because I forgot!" "And did you forget to draw your pay?" The

torget to draw your pay?" The check of it! How would he like to take home what I get on pay day?

5. My nelghbour Rubinin. Shady creature. Probably a pervert, Music going every night, women squealing. Ornies. Never invited me oper the

whatname! 6. What a ghastly summer! So

hot and close. They say solar radiation is on the increase. We'll go bloody bald!

7. Altogether morals are slipping people are going to seed. And in

the street today I didn't see a single pretty girl.

8. Our boys can't play football for love or money. Dishand the teams and use the stadioms for growing cucumbers. That'd do

more good, anyway.

9. What rubbish you get on TV all the time... Think I'll get rid of the set down at the second-hand

10. What a life!

At the tenth point Lapenkov's thoughts ground to a halt. But not because he had reached a climax.

ne in By no means. It was just that he pensuddenly noticed that a bearded masuddenly noticed that a bearded masuddenly noticed that a bearded masuddenly as the same table was looking at him intendy. Lapenkov didn' in him him at him be got flustered. He gulpe down his blancmange and made for

down his blanemange and made for the door. But he was somehow conscious with his back that the bearded man was following. They walked about ten yards

along the street, and all the while Lapenkov could feel the eyes of the other man boring into the back of his head. Suddenly be wheeled. "Excuse me," the bearded man said, "but the thing is that I'm as

artist, and I'm very impressed by your face . . . It's just what I've been searching for . . "
"What do you mean?" Lapenkov

asked, confused.

"Just what I say!" the other replied. "You have a face in a million . . A low, brutish forehead, heavy overhanging eyebrows, a pointed nose, narrow, nervows,

lips... And your cheekbones! God knows how to describe them!"
"What have my cheekbones got to do with it?" Lapenkov was a listle put out. "What do you want, compute?"

"I want you to pose for me," the artist said. "I need your face badly for a picture I'm painting... It won't take up much of your time... Just a few sittings... And I'll pay

you for it!"
The friendly smile on the bearded

man's face and his tender words
"I'll pay you" acted like a tranquilliser on Lapenkov.

"Who do you want me to pose as?" he asked. "A murderer," the artist said with

a smile.
There was a pause.
"What kind?" Lapenkov finally

asked cautiously. "Why is he a murderer? Under what article of the act?"
"He's not a murderer in the usual

sense of the word," the artist continued, still smiling, "He's a poacheer. The painting's called 'The Murder'. Thick wocds all around, and in the foreground a roc and the hunter. The delicate, quivering roc, covered with gore, lies in the grass, the hunter bending over her. A poacher with a smoking rible in his hand. He has a low, brutish forehead, and beave, overhanging everbrows. His

thin lips are twisted in a sadistic grimace."
"Here' come off it!" Lapenkov protested. "I won't do it. Who do you think you are, anyway! I'm an animal lover... And there's my family and the neighbours to think

of."

"Where do the neighbours come into it?" The artist made a face, "And as far as loving animals, so, it's out of sheer love for them that m doing this picture at all. I consider bunting an immoral sport. This will be a campaigning, propagada picture from beginning to end It'll be a protest! Why do you refuse to help in this noble endeavour?"

"I don't refuse," Lapenkov mumbled, "But it's a bit off, somehow. You'll paint my picture, and then what will they say? 'Lapenkov's a scoundrel', they'll say."
"Why have you got this primitive outlook?" the artist demanded, pull-

"Why have you got this primitive outlook?" the artist demanded, pulling another face. "A painting im't a photograph, everyone knows that very well. And if anybody does recognise you in the hunter, they won't feel anything but respect for

you..."
"Why?"
"Because not everyone poses for

a painter," the artist told him. "You might say it's a great honour. Surely you realise that."
"I have to think it over," Lapen-

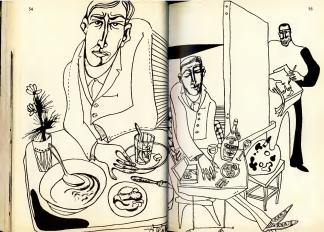
kov replied with a gusty sigh.

"All right," the bearded man
said. "Let's go over to my place.

It's only a quarter of an hour's walk
from here. That'll give you time to
think it over."

He put his arm through Lapenkov's and hustled him along the street. Lapenkov could hardly keep up. He had to trip along smartly and at times even give a little skip. So his thoughts were skipping and tripring, 100.

The property of the bell with the Why? Because. Why should people laugh? What for? Well, they wouldn't laugh really. They'd be frightened of me. And why shouldn't they? Let people why shouldn't they? Let people of a face! Hubl But I've got a brutish forehead! Ahal Shiver in your shoes, my little pigeons! You, Tochlin! And you, Korolkovi And Ruisim All of the min! All of the min! They min!



SPUTNIK

To - Insult - Me! In the painting I've got a gun! Standing over the roe! Huh! They're not such fools! Today the roe! Tomorrow them! Just try to pull a fast one! See what happens if you don't get me a voucher for a free resticure! A protest picture! Just see, you lot, what you've brought a man to! I'll make them all come and see it! Show them my bestial face! And it'll be interesting to look at myself in the picture! Really interesting! Fate brought us together. The girls will be petrified with fear and will all fall in love with me! Ab.

"Here we are," the artist announced, halting before the entrance to a large brick building, "Well, do

von agree?" "Vor "

"I thought you would." The artist had a large light flat. The three rooms Lanenkov wandered through were filled with beautiful old furniture, including plenty of bookshelves. From the ceiling hung huge chandeliers with a multitude of glass pendants. It was all very comfortable and, most important, cool.

"Won't you sit down?" the artist urend. He sat down timidly and took pleasure in the cold leather at his

hack. "Have some cognac?" "Can't, Doctor's orders." Lanen-

kov said lugubriously, "To bell with the doctors," ex-

claimed the artist. "I mustn't drink it either, but I take it in small doses and nothing happens,"

He went out of the room a soon returned with a little trollbearing two large glasses of vellofruit juice of some kind, a dish lemon slices, a box of chocolates some dainty biscuits, a large day bottle with a bright label and two

empty. bulbous wine-glasses. Lapenkov looked on enchanted a all these delights and to his amaze ment found his mouth watering although he had only just eaten

"Drink up Don't he shy show it!" the artist commanded as poured out a glass of cognac, "Thi is a very fine brand I'll put some music on. I like to have music while I work, Find Lehar particularly in spiring. Have you any objection?" "No. no. of course not." Lanen-

kov answered, again embarrassed. They drank. The artist merely sinned a little, but Lanenkov drained his glass and then tossed off th fruit juice. The cognac was potent with a fine aroma. The bigger glass contained orange julce, ice-cold. wonderfully joyful feeling stole over Lanenkov especially at the sight of the artist filling his class again.

"Have a smoke," the artist invited, putting a packet of cigarettes on the table. "Benson and Hedges, I'm very fond of them."

"Against doctor's orders." Lapenkov said diffidently, then waved his hand in a fatalistic gesture and lit up. The cigarette was surprisingly plessant and strong. It made his

bead whirl. "Ah, well, now to work," the

attist appounced He switched on the tape-recorder,

not out a great album and settled down in an armchair facing Lapen-Music poured from the loudspeak-

ers fixed to the walls, and a blissful languor filled Lapenkov's bosom. He drank his second glass of cognac and helped himself to a third.

"What a fool I was," he thought so himself, "Just imagine - I almost refused. This is the life . . . " The artist scrutinised Lanenkov

for some minutes, then suddenly put down his sketchbook. He lit a cigarette and began pacing the room. "Tanenkov." he burst out at length, looking his model right in the eyes "what's happened to your

"What?" Lapenkov pan a hand over his cheeks in bewilderment. "Well, what bas happened to it?" "It's undergone a radical change, Well, the features are more or less the same, but the expression's quite

the centeen " "I don't know why that should have happened," Lapenkov said. "Perhaps it's the cognac." "That's understandable, But I

must have that expression you had on your face in the canteen. Grim, angry, and nuthless. Can you remember what you were thinking

about in the canteen?" "Various things," Lapenkov said in a subdued voice. "About people, About life "

"You've been having a lot of

"Plenty."

ed. "Then just recall all the things you were thinking of, remember all your enemies and try to imagine vourself eiving them their just de-

"Er . . . bow?"

"Murder them. In thought, of course. Imagine you've been handed a rifle and told you can shoot anybody you like. Be merciless. Come on. Let's try this psychological experiment, O.K.? Shut your eyes and concentrate "

Lapenkov obediently closed his eyes and began to think.

At first his mind was a blank. Just a pleasant dizziness, and then an exquisite pain through his whole body. He made a great effort and one lone thought flashed into his bead: Have a drop more coanac, old boy! No. that wouldn't do! Then his mind went blank again. At last the thoughts began to flow. They different. It's not what it was in were beautiful thoughts, alluring, aromatic thoughts, with the fragrance of cognac and Benson and

Hedges cigarettes. "I'll kill that cook. What a bastard! But in-cl-den-tally, why on earth should I? He makes rotten soup! Well, so what! If you don't like it, don't eat it. Why commit murder? Better to finish off the local doctor. But poor man, he runs around all day visiting patients, doesn't get a chance to sleep at nights, and I'm thinking of shooting him! But Tochilin, now, he's one that deserves it! Why doesn't he get

me a voucher for a rest-cure? Be-

cause he hasn't got any! Where will he get it from? Give birth to one, or what! And he's a real good fellow actually. And the departmental chief Korolkov, he's another. If he shout ed at me, it means I asked for it! I forgot to send the enquiry off to Kerch, didn't I? Long may be live! And may be flourish! . . . Oh, what marvellous music, Lebar? Wonder, ful man. Lehar! I'll have to ask my neighbour Rubinin to get some of his music taped. Rubinin's a nice fellow, too. A young, handsome lad. All the girls fall for him . . . Why should I shoot bim? No, I'm not sore at him. I was just mad at the

of radiation about . . . Should I shoot the footballers? Thousands of them, though Not enough cartridges . . . And anyway. how would we manage without foot. ball? It's a man's only pleasure But why only? Is it so bad to watch television in the evening? "La-la-la. I'm striding through Moscow ... Is that Lehar? No, can't be, it's one of our songs . . . Lovely song . . . La-la-la, the trees so green . . . la-la-la,

summer. Beastly hot summer! A lot

the true-ec-ees so-o-o-o stree-ee-eeeen, the trree-ec-ec-ec-ec-ec . . . "

Lapenkov was asleen baying wonderful dream. He was walkin through a beautiful city, beautiful people were coming towards him and he had no eastritis. He was a deliriously happy that he picked in

his rifle and fired into the air through sheer lightheurredness. The shot was so loud that it woke him He gazed stupefied for a few seconds at the bearded man sitting in the armchair opposite him an

drawing something in a sketchbook Then he remembered where he was and what he was doing there "Listen. comrade artist," he began

in a complaining tone "Please don't "Don't what?" the artist asked raisine his head.

"Don't make me into a murderer," Lapenkov begged, "I'm not suitable for the part . . ." Without knowing why he started to sob. "Don't worry," the artist said with a smile. "No need to get upset. I'm using you as a model for the

a document purporting to be the deed made out in 558 A.D. relating to the transfer of royal lands to the Abbey by King Hildebert I. The monks were somewhat slack about their homework and used parchment instead of the papyrus on which all authentic sixth-century title deeds were written.

Amone such falsified documents in the Russian archives have been Prince Andrei Bogolyubski's deed of gift to the Pechersky Monastery in Kiev (Kievo-Pecherskava Lavra) and that of Prince Dmitri Donskoi

produced real works of art.

Historical Forgeries

by Alexander Monasit. Ph. D. (Hist.)

condensed from the magazine "Nenke i Zhizo"

to the Trinity Sergius (Troitse-Ser-Ever since writing was invented sievsky) Monastery. A titular counsellor, Alexander ling forcers, and the results of their

Sulukudzey, produced two notorious labours are filed away in archives foregries early in the nineteenth cenall over the world. Some of them tury, in what purported to be Old Russian When scholars out down Not so the rather naive monks of to the job of translating them, howthe Abbey of St. Vincent and St. Croix in France, who came up with ever, they turned out to be meanincless imphles of words.

From Sulukadzev the threads stretch down to the present day. In 1954 the massyine Zhar-Ptitsa (Firehird), published by Russian emigrés in San Francisco, began a series of articles concerning a document supposedly dating from the seventh and eighth centuries in Russia - 200 and even 300 years earlier than the previously known earliest records in a Slavonic language.

The story was that in 1919, during the Russian Civil War, a Colonel Izenbek of the White Army found



on a landlord's estate some wooden panels bearing texts written in ancient script. After the defeat of the whites, Izenbek fled abroad taking the panels with him all over Europe. In Brussels he showed them to a certain Mirolyubov, who publicised them 35 years after they had been found. This publicity was continued by Sergei Lesnoy, a Russian-born professor of entomology now living in Australia, who publishes his works in Russian in Paris, Munich and Winnipeg at his own expense. They are not about beetles or butterflies, as might be expected, but

dated back to the seventh century and are written in an "unknown" Slavoini language. He calls them the Book of Blaire. The panels have disappeared since they were in Mirolyubov's possession, but, according to him, they all measure 15 inches by 9 inches and are one-fifth of an inch thick. The text was inscribed with an awl and rubbed over with some brown substance.

Lesnov claims that the panels

about Russian history.

This is a sheer forgery. Its history is not yet known (there is no eyidence that Izenbek was the faker) but the language used is an impossible combination of old and new forms. The panels must have been the work of Sulnkadzev.

Another forgery circulated recently among Russian emigrés was a manuscript called The Life of Visalimir the Red Sun. A Yuri Arbatsky, a student of Byzantine and Russian folk music, informed Dr. Georgi Okamir Charles Vernadsky, a distinguished historian who is a professor at New Haven University, USA, that in the thirties he had discovered, somewhere in the Balkans, a manuscript written on parchment in Old Slavonic. Its theme was the life of Vladimir the Red Sun, an early Russian ruler Arbatsky also claimed that chemical and general tests carried out on a fragment of the manuscript at the Prague Musicological Institute in 1940 enabled the conclusion to be drawn that the perchinent and the text written upon it dated back to approximately the seventh century or at the very latest the ninth central

The present whereabouts of the document are unknown, but As-battely is supposed to have had a copy of the manuscript and photo-praphs in his possession which he has kindly presented to Professor Vernately. The Professor essent in have been taken in by the entire tigmanole about the discovery of the manuscript, yet polins out that the contents and relate only to the elevent and relate only to the

The manuscript is written in some kind of "Russian script", claimed to be a secret code known only to a secret society whose members lived in Northern Albania, a fraternity centred around the monastery of St. Iona-Vladimir in Elbasan. Arbatsky is said to have been in com-

tact with this fraternity.

According to the manuscript,

Prince Vladimit, who incidentally
lived at the end of the tenth and beginning of the eleventh century, be-

came distillusioned with Christianity. and left Rus for the Balkans, where he embraced the faith of his ancestors, the old Slavic religion. History whites, however, that Vladimir died in Rerestoy near Kiev in the wear 1015, but because of the disturbed political situation and complications regarding succession to the throne, the nobles concealed his death from the people. It was decided to send his body to be buried in Kiev and this was done in close secrecy, even to the extent of the body being amusoled from the house where he died, wrapped in a carpet. This secyear may have been the source of the rumour that the Prince had not died at all. A similar legend later grove around the death of Czar Alexander I, who was said to have gone

to Siberia under an assumed name.
Such is Dr. Vernadsky's interpretation of The Life of Vladimir. Dr. Vernadsky evidently not only believes in the authenticity of The Life but tries to relate it to historical fact.

One can only have grave doubts about Arbatsky's manuscript. The "Russian script" seen in the

The "Russian script" seen in the photographs of the parchment bears no relation to any Slav alphabet whatever. No language or alphabet so far known is of any help in reading the symbols used. Every code has its own rules and whoever deciphers.

a code should give the key to it. Arbatsky reads the symbols as he sees fit, but nowhere produces any evidence to prove that his reading is correct. The manuscript is nowhere to be found and no verification is possible. The secret society in Elbasan is so "secret" that nobody has been able to find it. Particular suspicion falls upon the analysis said to have been made by the Prague Institute. for which no documents have survived. It was only in 1953 that the radio-carbon method of analysis was discovered, by which it was possible to fix the age of parchment bearing an inscription. Yet somehow or other Arbatsky managed to get someone to date the inscription by means of chemical analysis 13 years before the radio-carbon method was de-

And, of course, why should seventh and ninth century scribes describe events that took place in the deventh century? Furthermore, we do not know of any written Slav language at such an early date.

Why should so serious a scholar as Vermadsky fall for this story about a manuscript which makes such a dubious impression on other skin lars? Possibly because emigré Russian scholars abroad are keenly interseted in the history of their native land. But it is a pity that they should be so easily taken in.



Dishes from Odessa

Odessa Hors d'oeuvre

For 4 portions: 13 oz fatty cottage cheese 2 The butter

116 oz shelled walnote garlic, salt and pepper to taste

Pound walnuts and grate garlic. Season cottage cheese with salt and pepper, add melted butter, walnuts and garlic, mix thoroughly to a smooth consistency.

"Kuvalnik" Roll

For 4 portions: 1 lb calves' liver 1/2 lb pork fat 11/2 The gelatine (1/2 oz) salt and pepper to taste

Scald liver in absolutely boiling water, cut into narrow strips and fry slowly until done

Chop onion into fine strips and fry until solden brown.

Cover piece of pork fat with boiling water and boil for about 30 minutes. Chop pork fat into small pieces and add to fried onions, liver and gelatine. previously soaked for 5 minutes in 1/2 cup of water. Season with salt and pepper, mix well, then do up in cellopbane in the form of a roll. Place in boiling water and cook for 10 minutes on medium beat. Allow the roll to cool naturally, then slice and decorate with cold butter

Any piquant sauce, including horse radish, may be served with this dish.

Odessa Rissoles

For 4 portions: 13 oz chicken fillet

2 eggs 4 The milk 7 The butter salt to taste

116 ten flour 1/a breakfastcup breadcrumbs

Mines chicken fillet finely, putting it twice through the mincer. Add beaten eggs, 2 The milk, and salt, and mix well to a smooth consistency. Make a thick white sauce as follows: melt butter in a saucepan, add

remainder of milk, and salt to taste, bring to the boil and then, removing succepan from gas, add flour in a fine stream, constantly stirring. When the sauce cools and thickens, divide it into four parts. Divide minced chicken into four parts, shape into rissoles and place a

portion of sauce in the centre of each. Coat rissoles with breadcrumbs and En in her fat for 8-10 minutes. The rissoles may be served with fried potatoes, marinated fruit and

preen peas in tartlet cases.

Tourist Special

For 4 partions: 1 lb pike-perch 1/a breakfastcup milk

3 oz butter 1/a breakfasteun breadcrumbs

1 breakfastcup vegetable oil Remove skin from pike perch fillet, divide fillet into 4 pieces and leave

C. or 212 degrees F.) for 10 minutes.

to sook in milk for 2-3 hours. Then remove from milk, squeeze gently and best out well

Place a knob of butter on each piece and roll each fillet into a cone shape

Beat eggs and brush on each cone. Cost cones with breadcrumbs, then fry in previously heated frying pan in boiling vegetable oil (at 100 degrees

To Alaska via Kamchatka

by Nikolai Dikov

from the newspaper "Sovietskava Roselva"

The author of this article heads the Laboratory of Archaeology, History and Ethnography at the North-Fastern Retearch Institute (Siherian Branch of the USSR Academy of Sciences).

D adjocathon dating tests of archae. Nological finds indicate that man appeared in the Western Hemisphere between 10,000 and 30,000 years ago. But how did he get there? Primarily across North-East Asia, it was assumed but since archaeological evidence was lacking, some scientists pointed to possible, but highly improbable, ocean routes to America through southern Pacific latitudes - Polynesia and even Antarctic waters.

Archaeological corroboration of the hypothesis that American Indians came from North-East Asia via the Kamchatka Peninsula was provided in 1964 by the discovery of ancient dwellings there and the facts revealed by a subsequent study

It was an expedition from our Research Institute that found these

dwellings of palaeolithic man. Fire had burned in their stone hearths more than 15,000 years ago. Charcoal and rudely fashioned stone tips for a type of dart different from those found earlier in the area were located at a depth of about two vands. They closely resembled dark heads discovered in America.

Near the ancient settlement we discovered a burial ground, where the most interesting finds were beads and pendants of various styles. skilfully shaped from soft coloured stone. Typically Indian, they were used to decorate the clothes of the

It is clear, then that America was first settled by migrants from Asia. who came by way of the northeastern tip of the continent, specifically through the Kamchatka Peninsula

Pinpricks for Health?

Practice Outstrips Theory by Professor Vadim Vogralik, form the magazine "Therapeutical Archives" Line of the stomach Line of the bidney Line of the lunes



Acupuncture points for the treatment of stenocardis

Pinpricks are generally a source of irritation. And if you needle someone you are usually exasperating him to breaking point. But back in the fourth millennium before the birth of Christ - at least that's the period quoted by legend - someone discovered a way of treating human ills by sticking needles into their flesh at certain very specific points.

The legend ascribes the discovery to the Chinese Emperor Fu Si, a man of extensive learning in a number of sciences. It was all an accident Once, they say, a certain peasant

whose name has been lost to history was cured of agonising headaches in miraculous fashion. Working in the fields one day he inadvertently struck himself on the knee with his mattock. His blinding headache disappeared in a flash. After that the local inhabitants made a practice hitting themselves on the leg with



a sharp stone whenever they had a brodache The Emperor Fu Si heard about

it; he discovered that a jab with a stone peedle was less painful and. what was the main thing, more effective than a blow with a great hunk of rock. It was later found that the same procedure helped with other ailments too

Archaeologists have in fact found stone and bone awls on many occa-

sions, and as they relate to the Late Stone Age and Early Bronze Age they could, in the view of the exnerts quite well have been instruments used in this form of medical treatment, which is now dignified with the name of acumincture (acus is Latin for needle).

The first written records of the use of acupuncture date back to the 6th century B.C. - again in the East, in China, In the West the records begin considerably later, in the 17th century A.D., in France, when the method was already widely practised in Oriental medicine. But thew was no substantial interest in acupuncture in the West until the 19th century, and then it was aroused primarily by publications written by French scientists.

In 1816, Louis Berlioz, father of the composer, wore a book Notes on Chronic Diseases, Blood-letting, and Acapuncture in which he reported upon the favourable results obtained by sequenciar treatment. The method, which had been looked upon as quackey until then, gradulous expective until then, gradulous expective until the propose of the propose of

in 1828 by Pyotr Charukovsky in the Military Medical Magazine. Many travellers had testified to its efficacy when used by the Chinese and Japanese for colic, theumatism and many other illnesses, he said, especially when these were accompanied by severe pain.

In 1945 the International Acupuncture Association was set president, who claimed that there were now about one million practitioners of acupuncture throughout the world. Ten thousand of these were practising in Europe and America sing in Europe and America ter of a century ago, so acupuncture there of a century ago, so acupuncture seems to be conquering the world with remarkable spindity. Why has this apparently quack method become so popular? Perhaps someone has devised a scientific explanation for it?

Ivan Pavlov, the eminent Russian physiologist and winner of a 1904 Nobel Prize — be is the man who discovered conditioned reflexes — wrote: "Why and how do compresses, mustrad plasters, cupping, and so on belp? Has physiology any sastifactory answer to this question? Here, obviously, is a vast gap in modern physiology."

One could make approximately

the same comment about the present state of sequenciare. There is tremendous experience of its use by the trial and error method, without any theoretical backing. Experimentation is the basis of the carrieral worked out instructions for the practical application of the method. It is one of those cases, by no means uncommon in medicine, where practice gets ahead of theory. Acquantum practitioners today

know where to put the needles in to obtain a particular effect, although they do not know why it works in general or why the choice of a particular set of sites will produce a particular result. They blindly follow an atlas compiled in the Middle Ages.

Way back in 1027 Chang Wei-i, a Chinese doctor, modelled two human figures in bronze and made little holes in them at the points where the needles had to be introduced. He located these holes according to some semi-mystical doctrine about



the 12 vital vessels of the body, which were supposed to link the body's outer covering with the internal organs. The holes were placed along these lines. Somewhat later, in the thirteenth

or fourteenth centuries, another does, Hin Teh-ping, added two more wital vessels." bringing the total number of holes to 693. Their placing has become firmly established. Abour 100 of the holes are considered to be fundamental, while the others are auxiliaries.

Attempts have, of course, been Attempts have, of

made to investigate these acupunc-

techniques. When a few years ago a Korean decape, Kim Bon Khan, published the results of a microscopic examination, he claimed to have examination, he claimed to have responding to invisible lines and points, which in his view made up a fourth system — the first three being the nervous, the circulatory and the lymphasic systems. It was this fourth system, he considered, that transmirted the excitation of the considered, that the considered, that the control of the companies.

ture points with the aid of modern

A Soviet practitioner, Georgi No-

vinsky, also discovered that the tissue at the acupuncture points differed substantially from the surrounding tissue. But the idea that there is a fourth system, a network linking

these points, has not been confirmed. But if there is in fact no system linking these points with the internal logans, how is the effect of the needle passed on? Most Sowiet acupantursias believe that this is done system. The excitation of the needle is perceived by the nerve endings in the skin, the blood vessels, the musters are the same than the control of the needle said the sineway, and transmitted as if by telegraph wires to the brain from a simple size of the needle should be not the possible of the same than the same tha

But that is only a vague general notion. Why are some holes for some disorders while a different set is used for others? What is the delican mechanism of each effect? What, in principle, is the difference in the action of accupincture and that of, say cauterising, massage, mustard plasters or electrical treatment? These and other questions still await an answer.

Naturally enough, the absence of a theoretical basis for acupuncture impedes its development, but it by no means indicates that the method is nothing but quackery, unworthy of serious attention by the medical men. What makes the method so attractive to some decrors?

The most outstanding results with the use of the method have so far been achieved in Eastern countries. But European doctors have also demonstrated its efficacy. A great dehas been published on the subjecin many countries, including severmonographs in the USSR (one of them written by the author of the

article). It must be admitted, however, the material published by we then precipited a corrected attains that the material published by we then precipited and the properties of the properties

the gap.

I have obtained information about the use of acupuncture from 50 m dical institutions in about 40 Sovictities.

Altogether the information everal 10,721 patients, quite enoug for serious study and analysis, total of 33 per cent were complete restored to health, 37 per cent eperienced a marked improvement their condition, and 19 per cent sor improvement. In 11 per cent of deases there were no favourable a sults. The figures speak for the selves — acupuncture deserves the condition are according to the condition of the con

Our clinic at the Gorley Med

Institute has treated about 700 ca (in two thirds of these the resi were clearly favourable, one fit found some improvement and or one seventh derived no benefit). No gave patients relief from a grariety of disorders — cardio-vas lar, gastro-enteric, pulmonary, at and many other types. Acupunct is beneficial, too, in diseases of I nervous system, insomins and ste mering, which do not always lend themselves to treatment by the usual methods. To facilitate the practical applica-

particular disorders. Soviet scientists have also designed an apparatus to help find these points, and research is in progress into the physiological mechanism of acupuncture.

gion of acupuncture, Soviet experts recently produced a corrected atlas of points, with concrete recommendations on the points to be used for be able to make it more effective.



Electronics Marks the Spot

topography

by Serafima Drabkina condensed from "Znaniwo-Sila"

C oviet scientists have now in-D vented an electronic device to detect the points on the bodies of human beings and animals used in the age-old medical practice of acu-

puncture. It is called a "Tobiscope" (from the Russian abbreviation T.O.B.I. meaning "revealing points of biological information") and it was demonstrated at EXPO-67 in Mon-

The tobiscope is a nickel-plated pencil-like instrument about as long as an average-sized buman hand. Its built-in lamp flashes each time in reaches an acupuncture point while it is being passed over the skin

There ste peatly 700 points close to the body's surface which are not detectable by touch, sight or even

the microscope

Although the charts or dummies of the human body used by acupuncture practitioners represent many centuries of experience by thousands of doctors, there is always the possibility that by mistake a blood vessel or nerve tissue might be damaged. This has often discouraged even skilled doctors, for the practitioner has to rely on the sensations of the parient in whose flesh he is inserting needles - they go in at an angle and to a depth of four or five inches.

The tobiscope is foolproof: light signal precisely indicates a acupuncture point and can check an the accuracy of standard acupunctus

The new device was designed by Dr. Mikhail Geikin in collaboration with Vladislav Mikhalevsky, an elem tronics expert. Dr. Geikin has so that the tobiscope's accuracy is ne surprising because the acupunctum points have a higher conductivity of electricity than other points in the immediate vicinity. The tobiscope

he says, has high sensitivity readily registers acupuncture poir through the thick hair of dogs a cows and other animals so t should benefit veterinary practice

Asked if the instrument could be explain the nature of these myster ous points, the inventors said the most specialists believed them to b special subcutaneous formations on nected with nerve ends and which could, therefore, extend the action of the needle insertion to nearly tissues and even the rest of the on omism

They admitted that doubts ha been raised by the device detectif similar points in plants, which hav no nervous systems. New riddle new light would no doubt be sho on this problem.

orbe use of the tobiscope is not expected to be confined to acupuncnite. In recent years there has been much talk about the possibility of Exerosing diseases by hidden points on the skin of the ear. These points are quite distinct from all others in that they can never be detected in healthy people, but when a man is sick his ear is found to have points giving information about the condition of his organs.

Early ear diagnosis charts were Jerson by the French doctor. Nogler in 1956, but only the tobiscope has been of use in specifying them. Now

Paradise Restored from the messzine "Osonyok"

Palaces, temples and mansions 2,500 years ago, on the vast elevation north of Samarkand Here was Afrasiab, the capital of Soediana, so beautiful that historians compared it with Paradise

The city survived until the bordes of Genebiz Khan fell upon it, and only ash and rain were left for the sands of time to bury. The cruel conqueror, it seemed, had succeeded in obliterating the city and its memery, the superb creations of its craftsmen and builders. But a levend lived on about the magnificent works of the ancient architects and townbuilders, the mighty King Aftasiab, who laid the corner stone of his re-

sidence on the spot in ancient times, In 1965 Uzbek archaeologists excavating the ancient city of Afrasiah unearthed some wonderful 13-centuby old murals, with colours still

about 50 ear points of all kinds have been studied, designating different oreans. Doctors who are convinced of the

73

value of ear diagnosis assume that the appearance of such a point is a danger signal about a particular orcan If this is so the new device has inestimable value

France and Italy were the first countries to buy the Soviet licence for the Geikin-Mikhalevsky tobiscope, which is manufactured by the all-Union association. Sovuzmedtekhnika, and is available for export.

bright and fresh.

In July, 1966, the Government of the Uzbek Soviet Socialist Republic declared Afresiah a state archae. ological reservation. An archaelogical department was set up at the Uzbek Institute of History and Archaeology in Samarkand where an Architecture and Buildine Institute. with 500 students taking various courses, including one in restoration techniques, has been opened too.

Extensive work is being carried on in Samarkand to restore the memorials of an ancient civilization Restorers have straightened out the minaret of Ulugbek's madrasah, part of the fabulously beautiful Register Uluebok, a descendent of Tamerlane, was an astronomer and mathematician, who built a marvellous observatory. Work has started to conserve Bibi-Khanym Mosque and other buildings.



Konchalovsky – Lyric Painter of Happiness

Happiness, you might say, dogged the footsteps of the Russian lyric painter Pyotr Konchalovsky throughout his long life (1876— 1936).

He had a happy childhood and a happy youth. Born near Kharkov, toddy one of the largest Soviet cities, 465 miles south of Moscow, he was the fifth child in his gifted, closeknit family, all of whom — father, mother, brother and sisters — were remarkably artistic. Konchalovsky selior was devoted to classical literature and music, and imparted his fare and music, and imparted his

tastes to his younger son from early boyhood.

After the family moved to Mos-

own in the late ophite, the years person and the benefit of association with leading artists of Russii. Frequent visitors to the Konchalovsky home were Ilya Regin, Vassili Starkov, Isask Levitan, Valentin Serov, Konstatnin Korovin, Londir Patsenak and Mikhail Vrabel¹). Surikov, Serov and Korovin recognised the temager's gift and praised his early efforts at painting. Surikov, for instance, said Pyort's blazing colours were "like a rela Somaintiv". The

"Self Portrait in Yellow", painted when Konchalowsky was 67. For details about Serov, Repin and Levitan see Sputnik No. 2, 1968, No 1, 1969 and No 5, 1969.





his father did not stand in the way

lovsky to Paris, where he studied at

the Julien Academy under Jean-Paul

Laurens and Benjamin Constant, He

visited the Louvre and the exhibi-

Happiness also went with Koncha-

of his artistic ambitions.

life, too. In 1902 he married Sur kov's eldest daughter Olga, The famous Russian painter had deve looed her inclination towards art by sharing his ideas with her a showing to her exclusively his unfi nished canvases, and she was excellent wife for an artist. Konche

tions of the Impressionists, in partilovsky's married life was warme cular Van Goeh and Cezanne. by love and unreservedly devoted Konchalovsky had a happy family to his children and painting.



"Spring, Three Clouds." Konchalousky

Konchalovsky was happy, too, in the friendships he made. Cheerful, frank and extremely companionable, he liked his fellow human beings and made great numbers of friends. Among the closest were fellow artists Ilya Mashkov and Aristarch Lennslov, and also musicians, actors, are ditectors, writers, and farmers who lived near him not far from Moscow.

Konchalovsky was happy as a

painter. From the time of his early exhibitions, recognition, success and even fame came to him.

He had many exhibitions in Russia, where he was looked upon as "French" and a "Cezunnist", and in France where he was termed a "Slav" in his painting. His one-man exhibitions in the mid-twenties in Moscow and Parls carned him a reputation as a classic.





Excellent health, a boundless love of nature, an intense interest in life, a keen eye, a fine sense of colour (rare even among great artists) and perfect techniques which help to explain the durability of his work made Konchalovaky one of the most viable and prolific of Soviet painters.

For almost 60 years he kept on painting, producing picture after picture, but he never overextendhimstelf, never succumbed to mod dity or obsession. His great fertill sprang from an immense urge to pt into colour the entire wealth of it world around him. He knew th throes of creation, but never stoppe working, which he always did with

A happy fate helped the artist



"Window of a Poet," 1935.

constantly. Characteristically, he almost never concerned himself with anything that contained even an element of drama — his was the world of the lyric, not the epic.

Like the rational Cezanne, the emotional Konchalovsky tried to model in paint, to produce not a flat surface but to recreate texture and essence, as if using his eyes not only to see, but to feel. In his pictures the main thing is not the subject chosen. What is far more important is the feeling of joy and buoyancy conveyed in them. As his contemporaries in France observed 40 years ago, his feeling for the beauty of life brought Konchakovsky's paintings closer than those of any other twenteth-century painter to the harmonious art of the ancient Greeks.

This explains why the painter

abandoned the ideas of Van Gogh, the idol of his youth. In maturer years, his exemplars were Alexander Ivanov1) and Titian.

Konchalovsky tried his hand at all genres, and left a wealth of excellent portraits and landscapes, as well as having revived still life on the lines of Snyders and Chardin. But his most outstanding contribution to painting was his bold and unconstrained blending of genres still life and portrait ("Portrait of the Writer Alexei Tolstoy") still life and landscape ("Meat, Fowl and Brussels Sprouts against a Window" and his many "Lilacs"), landscape and portrait ("Portrait of the Composer Sergei Prokofiev"), portrait and narrative painting ("Portrait of Stage Director Vsevolod Meverhold"), still life and parrative painting ("Apple Trees and Watch Dog").

Like all masters, he violated the canons of a genre in the same instant that he was most strict in their observance. What makes his still lifes so superb is, for instance, their implied presence of a person, and

1) An article about Ivanov appeared in Soutnik in June 1968.

the fact that they are so filled life. The term "still life", in 6 cannot be applied to his roses a peonies, to his famous lilacs and hi pig Raoul and to his fox lying kills on the snow.

an extremely hard taskmaster 1906, with the approval of his wife he destroyed his large canvas "To Drinking in the Arbour", which everybody liked, and which was a good as any Russian painting of th time. He destroyed many pictures in this way.

Confined to his studio in the I few months of his life, Konchalovsky still took youthful delight in observing his orchard, and the grass and patches of sunlight through the large open windows, and he kept on nainting what he saw - sunlit trees, currents straight from the bushes. still wet with rain or dew. Although seriously ill, he remained faithful his brush, which, as before, went of composing his lifelong hymn to and nature, to all that the artis loved, in all of which he never cease to discover beauty.







Sarting new information, reclarine to SPUTNIK, has revealed that it was not the apple intelligible to emptd flue, but the diamonds Staten offered he as an inducement to take a bite. And, the property of the series was come and the series of the series of

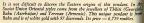
unor's to long helper the hears a heloved noice saying. "Defining hay me II-III." And what't HAT? Wed. — in might be applied, from a string II-II." And what't HAT? Wed. — in might be applied, from a string of the property of the property



If you can convince your wife that the price of that braclet is a bit steep for you, perhaps she'll lake this bedgehog, in Hilgree silver. He's a modest So roublet. This type of Hilgree is one of the most typical in Russia and dates back to about the thirteenth century. The rings on the right also have realitional features. Emeralds were the favourites of all the precious stoner realitional features. Emeralds were the favourites of all the precious stoner.

as far as the old Russian craftsmen were concerned, and they are favouties today, too. The emeralds in these rings are in settings of white gold with small diamonds. The stones themselves, in traditional style, are rounded, not faceted.







Enamelled were is typical of Northern Russia. Wonderful ename' decorated silver ware has been made over the centuries in the north of the European Part of Russia, and the craft is being continued today. This fine modern example is from Leningrad.



Visitors to the last Jewellery Exhibition in Moscow consider this coffee set to be one of the linest works ever to have been made by Leningad craftiumn (these exhibitions are beld annually) for representatives of eight ellery shops all over the country). Made of silver gilt and decorated with cannel, the set has a triking combination of rounded and annualer linest It is being ordered by jewellery shops all over the Soviet Union — and despite the comparatively high price, is not gathering dust on the shelves after delivery.





















represented on a trace-copied some. Vacuetory (3646-2501) drew his inspiretion from Euseign epics and seams.

















Successors

to Nijinsky and Pavlova?

"...almost perfect harmony"

from the Soviet press

Galina Ulanova, the chairman, and other members of the examination board will never forget the performance of two young students of the Bolshoi Ballet School in their finals in 1961.

Insiate in 1961.

After a few bars of Liszt, a frail dark-eyed girl floated out on to the stage. In her wake, as if trying to loid that melting figure, appeared to board members forgot freedings to board members forgot freedings an examination in which they were to examination exceedings to the sales of the trying to the sales when the sales were the sales when the sales were and turn, Like ordinary spectators they watched and then



In the theatre, and perhaps above all in hallet, there are some secrospart roles. Having once received a miraculous interpretation at the hands of an outstanding performer they are like unottainable heights for those who come atterwards. One such role was Anna Paylong's "Dying Swar". It was half a contain before mother bollering Money Plie rekone could give such an expressive interpretation. And the bellet fans looked uton Galine Ulanove's Juliet as being on such a level that no one would be able to do justice to the part again. But now Natalia Bessmertnova bas torceaded in convincing even the severest critic that perfection is a manysided thing. Considerable credit for this goes to her partner, Mikheil Lawovsky, for his brilliant Romeo to ber Iuliet.

drowned the dancers' final movements in applause.

The two young dancers were Natasha Bessmertnova and Misha Lavrovsky, names well known today among the stars of the Bolshoi Ballet Company.

They are old friends. As children they both attended the ballet circle of the Young Pioneer Club, and together they entered the Bolshot Theatte School, Misha is the son of the well-known baller-master. Leonid Lavrovsky and a noted ballerina, Yelena Chikwaidze. He has been at home in rehearst halls and dressine



rooms all his life. Natasha comes from a family in which no one has ever bad anything to do with ballet or any other art form.

Soon after being admitted to the Bolshoi company Misha was given a leading role in Asafyey's "Flames of Paris". "I shall dance this part as no one has ever done before", he decided and he rehearsed like one possessed, repeating the leaps and pirouettes until he could no longer tell left from right But before the audience even his most difficult movements appeared effortless. He flew over the stage like a bird. Recognition was immediate and

Natasha took some time to become a star. One of her first parts was the role of one of the wills in "Giselle", in Britain. The English proved to be far-sighted. "... The half dozen outstanding performers included at least one potentially great," wrote one of their ballet critics "From the corps de ballet she stood out like the moon from the stars Her name is Natasha Bessmertnova"

When she was offered her first leading part — Giselle — Natasha felt uncertain. In the theatre there was much talk of her litheness, her magnificent leaps and her lyricism. but there was still more about her unconventional arm movements and the lack of strength in her less.

Opinion was divided after the fire night. Some critics found mines technical flaws disconcerting against the background of ber natural gifts Others spoke of the "miracle" per formed by that fragile girl. They all agreed, though, that the Russian ballet had given the world ver

another star of the first magnitude Giselle was the turning point in Bessmertnova's career. She found her identity in the tole and gained faith in her own abilities.

The youthful pair recently danced in Prokofiev's "Romeo and Juliet" stoord by Leonid Layrowsky. It & difficult to say in which scene Bess. mertnova was at her most penetrating. But one thing is clear. There has never been such a Juliet since Ulanova at her best, though there

is no shadow of imitation in Natasha's performance. Layrovsky as Romeo danced with complete self-oblivion. The performance was an outstand ing success. But more than that, it

showed that both Becomertness and Laurousky hold promise of become ing dancers quite unique in the history of ballet, dancers of the calibre of Nijinsky Psyloga Illanova and Plisetskava.

Commenting on their Romeo and Juliet, one Moscow newspaper said: "Bessmertnova and Layrovsky exem-

plify almost perfect harmony."

Monday a Lucky Day

from the magazine "Yunost" (Youth)

by Yuri Tephyakov

"Wind north-west, hurricane force, Vessel beavily coated with ice. Losing stability. Engines working at capacity, Signalling SOS."

(Excernt from the lookaak of the fishing trawler Semipalatinsk, sailing in the Okhotsk Sea. off Kamchatka)

Monday is often called blue, sloomy, dreamy But this one, particular Monday in February. . .

Tust before nutring out to sea the oceans of the world. How are you captains of the fishing trawlers received a storm warning. "If you run into trouble make for

Russkava Bay." But, there it is, in black on white. on the sea-going fishing vessel's licence: No limitations. That means grounds you can sail off to any point on the

going to get there if you spend your time waiting around for good weather? A storm? So what. After all. the heart of your ship throbe with the power of 300 borses and there are no limitations on your grazing

To starboard, through rifts in the



fog, the outline of the cold, forbidding cliffs of Cape Krestovyi could be guessed at. The sea, by contrast, reemed warm and secure as a moth-

er's arms And suddenly, absolutely suddenly - I remember that perfectly - an icy blast shook the ship, as though the cliffs had let loose with a thousand cannons. The day was snuffed out, the bluffs disappeared and a wave, as though peppered by hail, boiled and swirled and tried to suck our tiny boat into the maelstrom. "Captain", the navigator velled,

A nor'swester! I had heard quite a lot about nor'-westers in this part of the world. I had met widows who had lost their husbands in a winter nor'-wester: I had met voune fellows to whom the word "nor-wester" sounded like a clarion call to battletheir fathers had not returned from the sea. And I. a journalist on my first trip out, had run right into a

"it's a nor'swester!"

nor'-wester.

For another hour the ship tried to hold its course But more and more often, waves slammed us amidships and more and more sluggishly the ship righted itself after every blow

"Lie into the wind." The captain. was in a black leather tacket, on his head a leather cap with ear-flaps. He not his hand on the wheelsman's shoulder, "Watch it, Borya, We're

15 degrees out again". Then he called to a sailor, "Send

the Chief up."

The "Chief" arrived, a slender boy, fresh out of training college, but already "Chief" as all Chair Engineers on ships are called "Well, Chief, how are the ensi-

"All right, still breathing."

"Take another look, We're in for a long one." The wind howled and the sky and the sea merged into one colour

black The windows of the wheat house were coated with a thick love of ice. The temperature was 20 be low A small embrasure in the show of ice was kept open by dint of hammering so we could watch the direction of the waves. Our only chance was to head right into them Any deviation and the masts, or though drawn by a magnet, lean

The direction-finder probed for the shore. We were right at the cape For a moment we saw the point on the screen and then it went blank The apparatus had been gripped by ice and we were blind

down toward the water

By three o'clock in the afternoon all our antenna had snapped off weighed down by ice. Vasya, the radio-operator, tied on his glasses with string and went out on deck He gripped the icy walls like 4 mountain climber. What could he do in such a hurricane? The wind whipped wires which looked like

heavy chains of ice right past his head. Another minute and he would be washed overboard. He was dragged back inside and his source

clothing pulled off him. "Sorry Captain didn't make it

'Ill try on the short waves."

"All right. We must get through!"

The captain's black jacket was a sunk of ice. He was pressed against the opening, watching the waves issuing their commands. The vessel was squeezed in an invisible iron orip. Everything creaked and groaned.

You felt as though you were minning and tilting in a rotary and hundred-pound hammer was methodically pounding you. One Sweet through your mind when and bow would all this end? When Vasya finally managed to

riz up a make-shift antenna, we beon to comprehend the full danger that had overtaken the fishing fleet. Viscos intercepted snatches of radio meisages and learnt that the Karvan. which had sailed an hour before us, had have to and they were chipping off their coating of ice. One sailor had been lost on the Rarmond Vasya looked ever eloomier and

searched determinedly for voices of the other ships. Suddenly he froze and then started to write frantically The trawler Karasa was communicating with the motorship Tulama Karasa: "We are being coated with heavy ice. We need immediate

help " Tuloma: "On the way. Are your engines working? Suggest you try to rem on chore

Then Tuloma to Petropaulousk-"Lost contact with Karaga." The captain stared at me, "You know what this means?"

He looked at me searchingly. "Afraid?"

"Bit of had luck " "The direction-finder's working again. We're in the same place, at the cape, only now we're being dragged out to sea. Our only hope is that the engine doesn't give out. We're oning to try and crash her." We were silent. Both of us were far away, far from the raging storm and sea. The captain adjusted his oronge life-helt. "I suppose my boys are also think-

abrust movement and shifted his sooking wer cap. He smiled into the smashed mirror and said, "Well, let's go and fight. Perhaps the ones that are waiting for us will see us again." Gripping the iron rail, I made my way outside. Snow and water kneedeep. Roar of a maniac wind. On the Beaufort scale, a 60 mile per bour wind means a senere storm Over 80 m p.h. registers hurricane-force winds. Our ship was being battered

ing of home now." He made an

by winds of up to 125 miles per That night everything possible was done for us. Eleven ships changed course and sped to our rescue. Each one of them searched the black ocean for the little chunks of floating ice that were our travelers

"All bands on deck!" the captain ordered. "The ice must be chipped

In their orange life-belts, the men tied themselves together in groups of five. The picks twinkled under the searchlights. Then a wave en-

pulfed them and I saw an orange hall skirtering down the deck. People disentangled themselves and attacked the ice. In 10 minutes they returned and another group took their place. The men dropped to the floor and sat without exchanging a word, greedily dragging on cigarettes held in frozen fineers.

So long as we didn't lose our sta-

Not only ice flew overboard barrels, boxes and bags went too. If the ship was lightened by only one pound, if it listed one inch less, that was a victory.

The deicing went on for one hour. For two, For three, One man's head was cracked, two had broken arms, the waves battered men against iron. Anyone who was still able to raise a pick and aim a blow at the

cursed ice went on deck.

Twice already the ship had leeled to far over that the mast almost foreign the ship had leeled and a superior of the men around me, only a sadness and a calm acceptance of something final. But how may be superior of the superior of something final, but how may be superior of the superior of

Again the ship's masts dipped down toward the ocean waters but again, shuddering, they stretched toward the sky.

At two o'clock in the morning the Chief turned up on the bridge.

"The way the engines are going, we'll last about another 15 minutes. She's at 600 degrees. All we're managing to do is stay in the same spot, we're not making any bendway." "Alyosha, Chief, you'll just have to work something out. Stop the ensines and we'll be swamped in min.

utes."

No sooner did the Chief disappear
back into his roaring, steaming hell,
than we were again tilted over. The

captain, hanging on to an iron but, shouted to the ship, "Hang on, old lady!"

Andrei spoke about the ship as

a person: "One more heel-over like that and it's the end. She's wrong out everything she's got. I know." Perhaps the Semipalatinsk beard

she didn't want to die, either.
"You know what I thought about
when the masts hit the water?"
This was addressed to me.

"Should I take off my boots or not? Silly thought, but there you are. You could be a champion swimmer, but in 20 minutes you'd freeze to death in that water anyhow. If anything happens, don't jump overboard, No point. ... Within half an hour I think we'll be swamped." Listen Andreil", I say, "perhaps I should write a note, you know, so leave."

"Don't be funny, if we don't subvive the ship will go to the bottom."
The captain spat blood. His lips were cracked, his face was frozen. And again the ship keeled over 10

"How are the boys?" he asked the first mate.
"Five are frozen ther've had it-

Two others have broken arms, the rest -- "

"Tell the rest to get out on derk and keep on with it. And now we'll gend out an SOS. Perhaps somebody " will hear. That's all!"

He smeared the blood over the icy crust of his face and went back to the embrasure.

"Semipalatinsk calling! SOS!" SoS! Semipalatinsk calling! SOS!" the radio operator frantically shouted into the mike while the frozen, played-out crew chipped at the ice and dropped with exhaustion like soldiers in hattle.

And suddenly through the roar and whine, through carefree music . . . the Queen of England is having a seception for . . . comes a faint voice: "Abakur calling! Abakur calling! Semipalatinsk come in! Give us your nessition . ."

position . . ." M.

The captain grabs the mike, day.

"Semipalatinsk calling! Our engines will give out any moment, they are being cooled by sewater. Last heelover was 60 degrees. Cannot de-ice any more. If it comes to that, pick us up out of the water. How far

away are you? Over."

More roar, more whine . . . the
Abokur is silent. But out of the abyse
it emerges once more: "Abokur
calling! Why don't you reply? (Why
don't we reply?!) Show all lights.
Approximately 15 miles away. Won't

be long, hang on!"

* * *

Excerpt from the ship's los:

"February 21, at 7:35 a.m. the tanker Ababar came to the rescue." Monday was obviously our lucky

Soviet Union's Oldest City

Archaeologists have discovered a stone with Urarru cuneiform inscriptions on the outskirts of Yerevan, capital of Soviet Armenia, This 2,750-year-old "birth certificate", which confirms that Yerevan is one of the world's oldest cities said. "I.

Argishtni, son of Menua, have erected to bonour my greatness this powerful fortress and given it the name of Erebuni. For the glory of the land of Biayna (Urartu) and to terrify my enemies."

From the magazine Vokrug Sveta (Around the World)

Star

by Andrei Zorki (Soylet Screen)

from the magazine "Sovjetsky Eksan"



rathe unexpected discovery of a I major new film talent is always a thrill. I first saw Alla Demidova in "Daytime Stars" and immediately felt that here was an actress on a par with Innokenti Smoktunovsky, the actor who won world-wide acclaim for his screen interpretation of the title role in "Hamlet"

She had Smoktunovsky's indifference to gloss, to empty, external theatries. She had the same understanding of the value and significance of naturalness, with a touch of something angular, non-professional in her movements. The quality of her acting was similar - it came not from the mind alone but from the mind and the heart. She gave an impression of diffidence, reserve, but a reserve that arose from a profound feeling of oneness with mankind, A subtle uncertainty The actress's ambition to appear as Lody Macbeth looks a little more likely soben you see her at home seeming this raiber severe dress with a hint of broome centuries about it.



marked her performance, a quality which every good actor brings ine, play in order not to feel as relaxed before the cameras as he does in his own home. There was nothing of the ingétuse about Alla Demidova. She was a mature, thoughtful actress, which is not surprising when one knows that she is an experienced stage acress at the Tagasha Theatre.

Alla does not look like the conmentional idea of a movie star She is not pretty but she has an interesting, intelligent face with a trace of melancholy in her expression. However she may the film star of the year. Following "Daytime Stars" she made another five films that were released the same year, including "The Sixth of July" and "The Degree of Risk". Another two films, "Tchaikovsky" and "The Living Corpse" are soon to be released. In snite of this beavy schedule, she continues with her stage work at the Taganka. Her nonular success was marked

Her popular success was marked by the issue of one of those picture postcards that adolescents are so fond of collecting. The colours are bright and Alla is photographed complete with modish hairdo and crimon mouth.

I was able to interview her one frosty Sunday evening when she had no theatre performances and was free of the grinding cameras. She sat before me in a dark suit and a white lace, highnecked blouse. Het hair was short and simple and she looked infinitely more attractive in the flesh than on the garish postered on my desk.

But Lady Macbeth, it reems, lin't enough for her. She's hoping to play Hamles, too. At least the looks the part, teen in costaine at the Taganka Theatre, it whose company the is a member.



get away from actine for a hit. When the does, the enjoys looking at



"Are you pleased with every film economics education give you added who you have played?" confidence on the set?" "Certainly not."

"Do you ever refuse parts?"

"Minor roles can also be impor-

"Any danger of being type-cast?" "Well the role of Spiridonova a

lander of the Socialist Revolutionary

Party in 'The Sixth of July' and that

of the commissar in Two Service-

men', for instance, are noles apart

on the surface, yet they have one

emotional element in common -

intolerance bordering on fanaticism.

On the other hand, the title role in

'The Stewardess', based on a story

by Yuri Nagibin, was quite different.

She is a somewhat weak, feminine, word-natured character. Then on the

stage I have been appearing as El-

mirs in 'Tartuffe', a type that has

been called 'la grande coquette'. As

character and spiritual qualities. The

scenario casts her as a political figure

rather than a woman, I wanted to

"What about the social and poli-

tical content of the role? That seems

to me to be the most complex

That I found easier. My training

"What did you find most difficult

was see, a fair variety "

in the role of Spiridonova?" "It was not easy to plumb her

feel the human being in her."

ESTROCT "

at the university."

sent. It's all part of the acting pro-

'Not at all. On the contrary. I am always obsessed by agonizing fears. I envy sparkling talents. Or rather,

all talents." "Was 'Daytime Stars' your first

"No. I first appeared in 'What is the Theory of Relativity?' I played a physicist who explained the theory to her fellow-passengers on a train. Frankly, I did it without understanding much of what I was saving but fortunately that did not spoil the film. I thought it was interesting. Then I was tried out for 'Hamlet' ...

"Hader Kovinteev?" "That's right. At one time I rehearsed for the title role - Nikolai Okhlopkov even considered inviting me to play Hamlet in his production of the play . . . As it turned out. Lenfilm Studios invited me to do a

screen test for Ophelia. Then I got the part in Igor Talankin's 'Daytime "Now you have returned to Talankin in 'Tchaikovsky'. Do you prefer working with different directors or with a particular one?"

"With one or two." "Who are your favourite directore 2"

"Igor Talankin and Ilva Aver-

bakh, I did 'The Degree of Risk' under Averbakh and can say without hesitation that he is 'my director'." "What do you mean by 'my di-

rector'?" "A director to whom I don't have to explain what I want to do." "How would you define the con-

helped. I am a Moscow University graduate in economics and even condacted a political economy seminar "That's an unusual twist in the biography of a film star. Does your

Alla Demidoua as Spiridonova, a leader of the Socialist-Revolutionary Party in the Illm "The Sixth of July".

temporary style of acting? What is

its most important element?"
"As I see it, the main content is
the social attitude, the social conscience of an actor. By now all the
external aspects and all the acting
techniques have been mastered. The
most important thing today is selectivity and intelligence. Only the
can the actor be original in his

creation."
"What is your dream as an actress?"

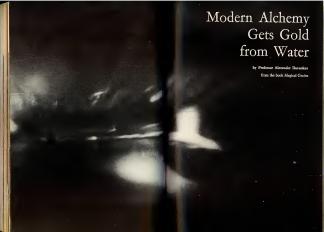
"I want to play the role of a woman assailed by problems. Lady Macheth for instance."

"Alla, what if I write about it? Some film director might read the story and exclaim: 'Demidova as Lady Macbeth! That's an idea!' " "Bu all means I'm only afraid his

reaction will be: 'But no one in the Soviet Union has ever filmed 'Macbeth'!"

When Alla had gone I was left with only my postcard and the memory of a fascinating woman.





the water.

pounds of silver.

six-millionths of a gramme of gold The water in all the seas and ocean. could yield more than four bounds of sold per head of our planet's population The problem is to find a profitable method of extraction

There may be salts of all metals, including such precious and rare ones as gold, silver, platinum, uranium, titanium and germanium, dissolved in sea water. The only metals industry obtains from the sea are magnesium, used in aircraft construction and notassium a fertilizer inpredient. The sea also yields large quantities of bromine and iodine, and man has learned to extract them.

But what about the trace elements? About 50 years ago man tried to obtain them by filtering sea water through charcoal and roke. Gold was extracted this way but in such small quantities that profitable operations were never developed.

Fresh prospects have been opened for the "miners" of sea gold by specially prepared resins which are capable of exchanging their ions for the ions of the substance which is to be extracted from a solution. The early application that was given to these resins - extensive but none too effective - was desalting artesian wells and sewage water.

At the Moscow Mendelevey Chemico-Technological College we made the first attempt to use ion-exchange resins for extraction of precious metals from weak solutions. We

used mobile-ion resins capable of exchanging their ions rapidly and completely for those of the enld in

We prepared the resin H-O, from our own formula-it is selective and extracts nothing but gold. We have several similar formulas, each possessing its own advantages. Our most recent method, extremely effective, concentrates on the ion-exchangers as much gold and silver as would have seemed fantastic a few years sen. We have managed to concentrate on two pounds of such pesin about four pounds of gold or six

We tested out first "resin-sieve" at sea 10 years ago. From aboard the S/S Vityaz in the Pacific Sereci Demboysky of the USSR Academy of Sciences Occanology Institute co tracted from the ocean water several milligrammes of gold with the help of that "sieve"

Of course, that was not even enough to make a wedding ring However, the method is promising - the cost of extraction on an industrial scale would amount to roughly the current government price

for gold After all, mining gold on land is not so simple, either. In hardrock mining operations the ore has to be taken from the mine, crushed to fine sowder and subjected to expensive and involved processing. Sometimes one ton of ore contains only 5-10 semmes of cold. But water, even shough a ton of it contains a much smaller amount of gold, is far easier

to handle. The ion-exchange resin can be used many times, once it is washed with a diluted acid solution. What the acid has washed out becomes nure metal at the next stage of processing. But the last resin we prodored can do without that sequence of operations. The gold ions it absorbs are precipitated as metal as soon as the resin is acted upon by reducing agents. The metal becomes lodged in the pores of the resin, which has the property of absorbing from the solution fresh lots of ions of that precious metal until finally the piece of resin is solid gold or silver. At sea, this ion exchanger is essier to work with than the rest of our resins. But in principle the use of the Mendelevey College ion-ex-

change "resin sieves" is not confined to see wester Once I received a note from a Soviet expert who has worked half his lifetime in goldfields. He sugsested extracting gold from rivers. where running waters frequently cerey gold dust downstream. The Soviet Union has such rivers in the Urals, the Pamirs and Siberia, and their gold content is hundreds of times as high as it is in the sea. Our resins. I am sure, might be used to advantage in extracting the gold

dust Gold frequently sets lost, being dumped in vast quantities with industrial waste. We have found effective techniques for extracting metals from industrial effluent also with the help of the H-O type ion exchangers. The Moscow Jewellery Factory is just one of many Soviet plants which use machinery to remove gold and platinum from industrial waste. Such machinery is

also in service at the Moscow Mint. With the aid of the ion-exchange resins it is possible even to change the methods of obtaining precious metals and rare elements from rocks. from the usual placers and veins. If the rock is crushed into small froments and the precious metal embedded in it is dissolved, the ion exchangers can extract it from the solution

Hydrometallurgy is putting ion exchangers to an increasing number of uses. Grains of these magical resins are already providing additional resources of chromium, molybdenum, vanadium, tungsten, tin, antimony, nickel and cobalt.



How Russian Football Was Born

by Yuri Korshak

from the magazine Fizkultura i Sport

In the limited sports life of St. Pe-tersburg (now Leningrad) at the end of the last century, the bicycle reigned supreme. The velodromes were located on Kamenny Island and the races held on a wooden or

Track and field athletes fixed up sports grounds near the River Krestovka and gave themselves the title "St. Petersburg Amateur Sports Club". About 30 or 40 members

dirt track

competed in racing, jumping, field events, shooting and tennis in the summer months.

The serene life of the club was disturbed in 1897 by a newcomer a football enthusiast named Georgi Dupperon. He started nagging club

With the first bounce of the ball on the field many of the members abandoned athletics and tennis. However, the whole project nearly



folded up when it came to allocating positions. Duperton, who simply overwhelmed everyone with his football lore, was unanimously elected captain, and then he picked the goalkeeper, the backs, halfbacks and forwards. Such terminology, of course, meant little to the embryo players, and when the captain pointed out to them their positions in the field. be faced a near-rebellion.

"How come? You said that football was a game of kicking the ball into the goal!"

Cantain Dupperon, who had as-

signed himself the key position of centre forward, told the grouchers: "So you want to score goals, etc. All right. Let's have a little tryout: whoever can score a goal in play will

be put in the forward line."

The tyros took the bait, hook, line and sinker. Not knowing how to kick the ball property, all their shots were ineffectual. So the backs and halffacks had to be content with

their designated positions.

The 1897 season was devoted curriety to training, but the following year they were challenged by another novice team, the St. Petersburg. Sportsmen's Clah, based in Tervichesky Gardens. The historic game was played on September 1898, under official rules, and the Amateur Sports Clab won 4: Sp. From that day on, records were peter of all games played and goals scored in Russian Football.

The first game produced foreseeable results. Homegrown football clubs began springing up every, where. For two years the players, had to be content with the odd friendly match on the sports field at Tavricbesky Gardens, or the grounds of the Cadet Corps. Then they started thinking about a tour-

1906 — A Local Victory

In the St. Petersburg Football Tournament in 1901 there were three clubs taking part: Nevlas, Nevakiye and Victoria. It is noteworthy that the first team was made up of Scotsmen and the second of Englishmen, while the third was an Anglo-German affair. All the players were foreigners working in Russia. The Scottish team won.

The Russian teams apparently did not work up enough courage to enter the tournament and limited their participation to the role of spectasors. But in the city's second tournament, in 1902, the Russian clubs decided to take a chance. Drawn against the Scottspen they lorg 2: 1.

The British had excellent pitches, and from time to time they reinforced their teams with new employees arriving from Britain. There was a definite exclusiveness among the foreign clubs, of which the English Newskiye was one of the strongest. An exception was made for two

outstanding Russians — the Yevangulov brothers — who played for Nevskiye. They were magnificent forwards in a class by themselves. While their opponents discussed their plan of attack during the interval at each match, the Nevskiye players calmly consumed tea and pastries, filing out onto the field again supremely confident of their autority.

And then one day the Yevangulov heothers left the Nevskiye team and went over to the Sport Club, as the Amsteur Sports Club began to be called.

Snort launched an all-out offen-

give. They clashed with Nevskiye on the home ground of the British. The stands were filled with cheering Britons, who rooted for their compatriots by rapping their canes on the stands.

It was of little help. Sport got

three balls into the net, and the British only two.

1910 — First International

Victory "What do we do now?" asked

the excited chief cashier bursting into the office of the promoter. "We're sold out!"

An international football match

between the All-Stars of Czechia and St. Petersburg was due to begin in a few minutes. "They're threatening to crash the gates!" cried the flustered ticket

Agent.

The promoter of the match could hardly believe his cars. It had never happened before.

Outside, a frenzied crowd of football fans was creating a terrific commotion. Some enthusiasts were climbing trees to try and view the game from outside the grounds. Others were besieging the gates.

The ticket crisis occurred because of art be S. Petersburgers had seen only their "own" foreigners in action. The Casche were the first "out-siders" to play in Russia, and they were considered to be one of the best football clubs in Europe. The Casch opparis, Vessely, had 300 internationals to his credit, while for the Russian players this was their debat.

For this first international game in 1910 the heads of the St. Petersburg Football League, either from inexperience or simply in panic, fielded the All-Stars from St. Petersburg's Group "B". The Czechs flattened them, winning by a score of 15.0.

In spite of this fiasco, the stands were again packed for the second game against the Czechs (this time with a better Russian side). The Russians soored first. Lacking condidence in their team, the fans did not respond to this goal and remained silent. The visitors, as if to stress that the first goal was a fluke, came back with three goals in succession before the end of the first half.

The second half had barely begun when the Russians whipped in two lightning goals to even the score. The fans woke up and gave their lads a standing ovation. The Czechs came back to score a fourth goal.

But the Russian levelled up once 1912 - National Tournaments again, and then went on to score The first championship of the

crowd went wild. country took place soon after the Olympic Games, in the same year, 1912. Russian football was still dominated by the St. Petersburgers 1912 - Olympic Debut but the Muscovites were feeling their oats. Before the inter-circ Dupperon, who continued to play match the press reported: "The

Muscovites are going to the game today to bury their pride or to walk away with heads held high in the the 1912 Olympics. consciousness that they are citizens of the city which holds the Russian There was hested discussion among championship."

> The first match, which like the replay, took place in Moscow, was a tense offair and when the final whitele blew the score was 2 · 2

The second match revealed the superiority of the St. Petersburgers: they won 4:1 and the Muscovites buried their pride.

In 1913 they again made a bid for the title but suffered a 3:0 defeat at the hands of the champions. The invincible St. Petersburgers were inbilant until someone reminded them that they could be coneldered at best only the champions of the North. In order to become national champions they had to beat the best team in the South -Odessa

1913 - Country Without a Champion

The Black Sea welcomed the visitors with torrid heat and a cate of 2000 - a local record - at the ground of the British Club in Odessa

The St. Petersburg players trotand onto the field in their crimson servs. As the referee was about to for his whistle someone pushed depute the crowd shouting

"Inst a minute!" Out came a lad carefully carrying a class of vodka. It was for the

centain of the Odessa team, who Jawmed the contents at a guln. Janned his knee and said: "Now we ren start!"

The southerners made the haughty champions sweat from the very besinning. During a pile-up round the sool mouth the Odessa team opened the scoring, and it was not until just before halftime that the visitors managed to bang in the equalizer.

The stands awaited the second half with impatience and some apprehension - surely the northerners

could play a better game than that! The whistle blew and the crowd muld scarcely believe its eyes - a second anal was sensed against St Petersburg! The football lords were being beaten! Then came a third and a fourth goal for Odessa. The boastful St. Petersburgers barely managed to score once more before the final whistle, and suffered a burniliating 4:2 defeat. The fans poured onto the field, hoisted their local idol, forward Bogomsky, onto their shoulders and carried him triumphantly through the streets of their city, cheering and dancing all

the way.

That evening there was a gala banquet for the visitors and the hospitable hosts began telling the northerners about local places of

But the St. Petershurgers were interested in other matters.

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"What a remarkable centre forward you have!" "The man who scored two goals

against you? That's Jacobs, an Englishman. His whole family plays football." "Well, that's interesting!" said the

guests, nodding to each other in understanding.

"And what about that outside who scored?" "That's another Englisman," The

hosts spilled out their secrets. "Wonderful players!" "Yes, they're all from the British

Club." "Now, what do you say about coming to us for a return match?"

The following day an official protest was filed with the All-Russia Football League. The football circles of St. Petersbury reported indignantly about the impermissible number of foreigners in the Odessa team. and demanded stem penalties for the offending club, The League up-

held the protest.

And that is how Russia turned out to be without a football champion that season. A year later, in a return match, the St. Petersburgers wiped the floor with the Odessa team Honout was satisfied.

a big role in promoting Russian football, was carrying on an increasingly brisk correspondence with FIFA concerning Russia's participation in

the fifth and winning goal. The

the fans: who should be picked for the national side. St. Petersburg or Moscow players? It was finally decided to send a joint team to Stockbolm - with St. Petersburg providing one more player than Moscow Weighing the chances of the team in Olympic competition, Dupperon said: "The team has been well trained and if it loses . . . it can lose with bonour." And that is exactly what happened.

The outstanding forward was

Vassili Butusov, the eldest of a famous footballing family (there were six sons and they all went in for football). Vassili was noted for bis amazing energy, and he was quite a phenomenon for his time because of his rare ability to head the ball. Vassili was especially dangerous when the ball was in the air near the opponent's goal, and he headed a goal in the Olympic match against the Finnish team But the Finns came back with two coals and emerged the victors.



Boris Paichadre, (extreme right, top left hand abotograph) was one of the great forwards in Sovies football, and is famed for his sophisticated manoeueres at the other team's soal mouth. Boriz slaved for Thilisi Densmo, and is the most outstanding flower in the history of Generica football, with its resulation for elegence and politibed technique. He was a real virtuoso, and remains a model for many

Vsevolod Bobrov (bottom left) was one of the brightest stars in Soulet loothall before a knee injury forced him to auit at the are of 31. Many consider him to have been one of the best "bombardiers" in Soviet football - he rarely missed with a shot. His talents meren't entirely masted. however, for he went over to ice backer, and became the finest forward in the national team. It was thanks to his efforts in the forward lines that the Central Army Club several times won the national football and ice-bookey championships. Then, ofter retiring Roberts ment over to couch ine taking on the Morcon Spartel icehockey team - time when they too. have won the national championship more

Soviet football stor of all time, more prople would name Gricori Fedotov (top right) He is often described as the Cholianin of loothall, and the fore sold that he did not to reach play football at but on a wonderful concert for the stands. Encrothing he did on the field mer nem and unexpected, in every same he could confusion in the ranks of the enemy defences, and brought for to the hearts of Army Club fant Fedoton is to Russian football what Robe Ruth is to American baseball. Jean-René Lacotte to French tennis and Paaso Nurmi to Finnish ath-

When Alexander Ponomaryou (bottom right) placed for Mascon Tarpeda he set a record which has not not been surpassed by any Societ footballer receive 149 ands in the championship tournessent The most darding thing shout his came was bis ability to crown an attack initiated by binself by scoring a goal. It is still a negatery to many who saw him how he managed to street about the field like lightning, popping up in places where no one expected him.



The lower are liable to shout theoreticar boarre and still keep on croaking until they also pubes the merits of individual players are being discussed—and still there'll be on agreement. But there's so Soviet fan subo would deny that Akinson, Zhenelkon, Khowich and Vashin represent the highest peaks in the noble art of goal-keeplats.

Anatoli Akimos (top lelt) wont to Parti wuth Morous Sparta in 1986 as as suknown youth. After the match with the Jamosa Racing Club de Parti thi name was on veryone's lips, and he came backwith the inknown "troos-sublet". He continued to justify the name for more than a decade, stronding everyone with bits brillions technique and particularly that the particularly are subject to the particularly and particularly and particularly to the particularly properties.

Another Sparsak goodkeeper, Vladitlav Zhwelkov (bottom left), is remembered as a shouldous player, entirely without work year. It is pythol that in eighteen words by all not det ningle enastly that in the 1990 person, when he did starr and turn should anth Another the 1990 person, when he did starr and turn should anth Another the Help only 17 goods, it is clear that he deseroes his false in the Hell of Egue.

The third of the quartet in Tiger Khomich (top right), a Dynamo legend. His jame spread through Europe after his jame spread through Europe after his — it was the rather calm and highly knowledgeathe British farm who micknesed his "Tiger", and it stack for life. The qualities for ushird he is resonant of the property of the property of the eye — and they are qualities he finds extremely avisal today now that he's gone over from goal-keeping to sports photography.

Lev Yazhin, another Dynamo wonder, it so well known that it is ben'lly necessary to go into details. He but several inner festared in the rymbolic team picked to repetit the strength of the



Inex and Ida On the evening of September 20, 1966, the Cuban Embassy in

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Moscow received the following teleerem:

"From Temir-Tau, Kemerovo Reeion. Dear comrades. I send warning of formidable hurricane likely to hit Caribbean area towards end of month Dyakov Weather Station Director, Gornaya Shoria,"

On the same day a telegram received by the Maritime Board. USSR Hydrometeorological Service in Vladivostok, read:

"From Temir-Tau, Kemerovo Region. Warning danger of violent typhoon in Sea of Japan, starting on

Soviet coast." The signature was the same.

Finding the pinpoint on the map that marks the settlement of Temir-Tou in South-Western Siberia is not essy. According to the most moderate estimates it lies some 9,300 miles from Cuba while the Cariba bean and the Sea of Japan are half way round the world from each oth er. It would seem odd, to put it mildly, that someone would venture to predict natural calamities arising at the same time but in completely

Fortunately, the Cubans knew nothing about Dyakov's second telegram. They naturally got in touch with the USSR Hydrometeorological Centre, So far, they were, informed nothing suggested the onset of a burricane in the Caribbean. As for the Temir. Tau weatherman's addiction to long-range forecasting, it was

different parts of the world.

entirely his own personal affair especially if he chose to send be warnings to other countries, The Centre staff would neither confirm nor deny his prediction.

The embassy staff were in a dilemma. Finally deciding it was been ter to be safe than sorry, they in. formed Havana and their weather centre alerted all meteorological

Cuba was basking in the warm sunshine of early autumn. Vigiland meteorologists scanned the skies and their readings, but nothing presaged trouble

Then, on September 28: "A sudden hurricane has attacked Guade loupe and Santo Domingo, causing damage running into hundreds of millions of dollars . . . In Cuba, a timely warning sent to her weather service and consequent measures

taken by her government have reduced losses to a minimum." (Iznestia. October 6, 1966.) A few days earlier a similar typhoon had arisen on the opposite

side of the Earth, in the Sea of Ia-"Typhoon Ida has retreated from the shores of Japan to the northeast, leaving in its wake a broad strip of destruction and the greatest

toll of victims since the Ise typhoon in September 1959 . . . 668 major landslides have taken place, some 14,000 homes have been destroyed and almost 60,000 flooded." (Prapda. September 27, 1966.)

Dyakov was right. Who is he and how did he do it?

Heretic

I arrived in Temir-Tau at the dose of the day. I asked an old lady where Dyakov lived.

"You mean the weather wizard? See that mountain? Drive toward the white bood over the house-

tops." About 15 minutes later I stopped in front of an ordinary farmhouse Behind it, higher up the slope, stood a brick tower with an observation dome, which I had used as a reference point. Adjoining the tower was a rectangular cabin prowing out

I met Dyakov at his doorstep.

of the carth

"This is my home," he said, "and my office is over there." He pointed to the cabin. "T've been working in it since 1936 "

We went into what served as an anteroom, half of it taken up by a stove. Another door led into his working "den", as he called it. It was partitioned in two. One section was occupied by deaks, bookcases, books, newspapers and photographic equipment, including a bulky enlarger, the top of which reached to

the ceiling. The other section contained a comp bed "I often work late into the night. so I sleep here to avoid disturbing

my family . . ." "How did you manage to make such accurate forecasts of Inez and

Ida? On what basis?" "On what basis?" In an instant he had crossed and recrossed what little space there was. "You ask me

on what basis? On the basis of heresy! My predictions of Inez, Ida, Emma, Shirley, Bess and all the other burricones are all based on heresy! All of them the mad rayings of an old man some wild in the taiga!"

It was not easy to talk with Dyakoy. He is aroumentative heated passionate. He is full of prievances. past and present. He is like an overheated boiler which has to let off steam or burst. He also has an incredible stock of information and knowledge.

"But, after all," he calmed down at one point and said in a reasonable tone. "hurricanes are not so difficult to predict. It is much more difficult to ascertain where there will be rain and where dry weather. and when "

"And can you?" "Sometimes. Let us say it's quite

possible." "All right But where does the heresy come in?"

"All my predictions are heresy," He made an effort to smooth down his shock of erey hair but it sprane up again, "I am a real heretic, like the English weather forecasters of a few centuries ago. But in the lone run they gained recognition, while my method still remains totally unrecognized. Professor Busayey for instance, denies there is any future

"Excuse me, who is Professor Bu-

"The Director of the USSR Hydrometeorological Centre."

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Solar Streams Early in May 1927 a sensational press report announced that France was planning the world's first nonstop flight over the Atlantic; two pilots were going to fly in their "White Rird" from Paris to New York.

The Austrian astronomer Karl Mierbach sent a telegram insisting that the flight be postponed because of increased solar flares, which he believed presaged storms in the Atlantic. The head of the French national forecast service, upon reading the telegram, replied with the brevity befitting a military man: "Nonsense".

The "White Bird" disappeared without trace lost in a storm over the Atlantic which had not been predicted by a single meteorologist.

In France, the death of the fliers was a national tracedy. Possibly that explains why the French were among the first to change their attitude to the study of the Sun. At any rate. when the Tenth Congress of the International Union of Astronomers held in Moscow in 1958, was told that solar observations could produce accurate weather forecasts, the French were the first to contact the author of the paper. He was a Soviet delegate a certain Anatoli Dvakov

In April 1959 Dyakov's paper was published by the French journal Artronomic and aroused areat interest: so great, in fact, that the editors presented him with a life subscription

Monsieur Dyakov thought it ill-

mannered to accept the journal with out giving anything in return, so from time to time he sent French astronomers lone-range weather

forecasts for their country.

"28. Rue St. Dominique, Paris-7 French Society of Astronomers: Dear Colleagues I think it my duty to warn you that according to my observations, of which you know the winter of 1967-68 is likely to be most severe all over Europe Violent waves of cold air will descend between the 10th and 20th of both December and January, with

temperatures ranging between 20 and 30 degrees below zero Centigrade. Cordial greetings. Anatoli Dvakov." The telegram arrived on Novem-

ber 27, 1967, two weeks before the first wave of cold air was due to hit French weathermen had no date concerning the cold air front and could only wonder whether or not the prediction of the Russian "prophet's would come true

The cold wave colled across all European countries Deakoy found consolation in the

fact that be had issued his warning to the French in time Why didn't he warn other countries?

To France he had written simply: "... according to my observations, of which you know . . . " And what could be write to Italy? Ask the Italians to take his word for it that in a counte of weeks Vesuvius would be clad in snow? Reference to his observations of the Sun as the cause of the cold wave would only have

seewed the debate between astronmers and meteorologists over the Jeerce to which the Sun affects our weather.

It is an old, long-standing debate.

end it is still going on. The Sun is an amazing body. Solar fores occur on its surface continuously but only once in 11 years do erious cruptions break out during "maximum solar activity periods" as scientists say. This cycle has been found to have a direct effect on all serestrial processes

During peak periods there are more earthquakes, the furbearing mimal population sharply increases alants grow more quickly, and perms propagate faster, including influenza sinuses. Epidemics take place on a wider scale in such periods and there are more heart attacks, crises of hypertension and nervous disorders Healthy people find themselves depressed, their capacity for work is essened and they feel out of sorts The Sun frequently "shows its temper" in between peak periods when it breaks out in sunspots and what are known as solar corpuscular streams - jets of charged particles - intensify. On the Earth such

days bring magnetic storms, which disront radio communication. Curiously enough, magnetic storms and consequently flares may be foretold by the human organism; meastrements of the electrical potential of the human skin show that this stops sharply four days before every such storm

Putting all these facts together has secustomed astronomers to the idea of a relationship between weather and climate on the one hand and solar activity on the other

What about meteorologists? "Of course, their thinking is not without logic," said Dyakov "but their logic is faulty. What is it built on? It is built on a fact established by astrophysicists - that the Sun's thermal energy remains constant for billions of years. Therefore, says the meteorologist, how can it suddenly affect the atmosphere and cause hurricane-force winds, floods and snowfalls? This approach to air circulation ignores all forms of solar energy other than thermal. Meanwhile, an important weather-forming factor is the flow of corpuscles The solar corpuscular streams constantly change their intensity and affect the atmosphere."

Dyakov dived into one of his bookcases and reappeared with a heap of notebooks in his hand.

"They do not deny that these streams exist. That would be too much. But they think that their effect on the atmosphere is negligible because the Earth gets only one two-billionth fraction of the Sun's radiant energy. This is mechanical thinking. What is vital is that the solar corpuscular streams are of an electrical character "

My host brought out notebook after notebook. They were filled with solar observations. Beginning in 1940, every day he would draw the Sun with a compass and mark the location, size and shape of spors on its surface. The man has accumulated over 10,000 solar "portraits"

showing the spots changing from day to day. All were made with the intention of tracing the relationship between solar activity and weather on Farth Dyakov set himself the task of

being the first man in history to forecast weather on the basis of watching processes taking place on the Sun, and to forecast it for a given area and period!

Front of Occlusion

point.

American scientists have estimated that in their country alone, if the accuracy of weather forecasts was improved by only five per cent, some 18 000 million dollars would be saved annually. In this they take the present 60 per cent chance of a correct forecast as their starting

Why then, the reader may ask, do Soviet weathermen ignore Dvakov's observations?

"There are theories," says Professor Busayev, Director of the USSB Hudrometeorological Centre, "that the Sun affects atmospheric processes. Much paper has been wasted in support of these theories but so far there has not been the slightest convincing explanation of the mechanics of this effect. It can be said with confidence that the external activity of the Sun, which takes the form of spot-formation, has nothing to do with atmospheric circulation." (Izvestia, May 30, 1965.)

This is an example of only one clipping out of a folderful entitled in pencil: "Front of Occlusion".

"What does it mean?" I asked Dyakov.

"It means the line where a cold front meets a warm front in a de pression. It is a cradle of cyclone In this case . . . let me show you skill statement by Academician Fwdo

"In the past period of time, more and more data has appeared which shows a connection between process ses taking place on the Sun and is the upper layers of the atmosphere with processes taking place in the lower layers, that is, with weather?

(Pravda, May 29, 1965.) But this statement is in direcconflict with the opinion of Profes sor Businey. Even more interesting the dissent comes from his immedia ate chief: Academician Fyodorov le head of the Central Board of the Soviet Government's Hydrometeo

rological Service "Are cyclones born as a result of the clash of two such mutually exclusive opinions?"

"So far only in the press. The arritude of Professor Bugayey and his supporters remains unshaken . . . Incidentally how long do you intend to stay with me?" "Why do you ask?"

"Please don't let my distinguished visitor think that I am bored with his company. I am simply wondering when I could take you to the top of Mt. Illu-Dag," Dyakov pointed to the wall. Only then did I notice a small photograph of an observatory under construction.

"It is the new weather station of Ulu-Dag," he said, "We shall move in soon. Shall I tell you who helned to set it up? Polyansky did. Dmier Stepanovich Polyansky, the Sovet Union's First Deputy Prime Mi-

I felt that as time went on I had

more and more questions to ask. However I returned to my original

"About Inex and Ide Pd like no know -"

"In a moment," From his bookrese Dyakov drew out an oldlooking book. "But I will have to begin way

He placed in front of me the maiden (Paris) edition of L'Atmosabère, by Camille Flammarion. found the required passage and manslated it as he went along; "An enudite friend of mine the astronomer Poev, director of Hava-

na observatory, has proved by a thorough investigation of the hurricanes which have been raging in the West Indies from 1493 to our day that . . . over two-thirds of the cyclones fall in the period between Anoust and October - the months When the intensely heated shores of

South America begin to attract colder and denser air masses from the northern continent " Putting the book aside, Dyakov began, perhaps for the millionth

time, to pace his "office". "I have collected data confirming the observations of astronomer Poey and compared them with processes Which take place on the Sun.'

Poey has registered top cyclonic activity from August to October Dyakov has found that if the Sun

reveals intense sunspot activity during that period, the velocity of cyclones off the shores of Latin America and, in particular, Cuba, jumps 50 per cent, reaching burris cane force.

Naturally, I am making it all sound very simple. In fact, long-range forecastine is a complex process in which mathematics and a wide variety of factors play a role before any conclusions are reached. Deakoy has devised a special formula which enables him to calculate in each individual case the time lag between solar activity and the resulting pro-

cesses on the Earth "Why do you fight your battle from remote Gornava Shoria? Why don't you come to Moscow, where you have already been offered several interesting posts in your field? And how did you come to settle in this part of the world?"

"In answer to the first part of your question. I like it here. In fact I've become a real Siberian. Besides, the sir is exceptionally transporent and the sky is nearly always clear. It is an ideal place for observing the sky. As for the second part of your question . . . "

365 Minus 20 In 1935 student Tolva Dvakov

went to Siberia where the future Kuznetsk Iron and Steel Works was The day after his arrival he was

summoned to the project chief. Yegorov.

Dyakov found him at the mod construction site.

"I am Dyakov," he introduced himself.
"Yes, I know. I've seen your

"Yes, I know. I've seen your record. I have a proposal. We've opened a weather station in Temin-Tau. In its three years of existence it has had six different chiefs. None of them was any good. And we badly need more or less accurate weather information."

"But I'm an astronomer, not a meteorologist. I graduated in physics and mathematics from the Public Education College in Odessa, then after a year's work as assistant attronomer at the Odessa Observatory I realised I needed further training and so I entered the Astronomy Department of Moscow Uniwessity So. "

"Those six had no specialised education of any kind."

Dyakov agreed to give it a try.
What jeopardizes the career of a
voluntary weather forecaster today?
Nothing, really. The right prediction
will earn him gratitude and appreciation, a wrong one will not be held
against him. Even the national
weather service, equipped with
weather satellites, missiles, air balloons and receiving a daily flow of
70,000 telegrams from all over the

world, is not exempt from mistakes. But Dyakow was well aware that one erroe on his part could undermine faith in his technique, even kill his idea, and who knows what a setback long-range forecasting would receive? He was aware of all this and yet felt he could not refuse to answer requests for weather forecasts. As news of Dyakov's success-

es spread, more and more such toquests came in.

"Dear Anatoli Vitalyevich, please, if possible, give us your ideas concerning the agrometeorological conditions in the Russian Federation in 1967. Respectfully yours, G. Osiyanov, Chief Executive, Central Board of Land-Tilling and Seed-Growing Ministry of Agriculture, Russian

Pederation."
"Yours forcessts are of great help in our difficult work of spring sowing. You would oblige us greatly byreporting the weather likely to obtain in Western Shoria in May and June. Respectfully yours, Yu. Malkov, Chief Executive, West Siberias Area, Ministry of Aericulture. Rus-

Sian Federation."

Dyakov has accumulated a drawerful of such wires and letters. They on in there after the request has

been met.

In general, Dyakov does not send round his propostications until he is asked. The exception is when it is a case of an imminent natural disaster. Thus, he informed the appropriate authorities -- three months in advance - of the impending catastrophical droughts of 1957 and 1959 in the south European part of the country and the droughts of 1962, 1963 and 1965 in Western Siberia and Kazakhstan, Also well in advance, he issued warnings about more than 60 natural calamities which befell Europe, Asia, the Atlantic area and the Pacific basin during the past 10 years, Each of

his predictions proved correct.

But all these predictions dealer

with calamities. How about the accuracy of his daily weather foreted to bu

Dyakov says he has made an average of 20 errors a year. Thas is, 20 out of 365. Such results would be highly satisobservation

Such results would be highly satisfactory to most people. But Dyakov's ambition was 100 per cent accuracy. If only he could have a modern weather station and an observatory, even a tiny one but wellequipped...
"What if I wrote to, say, Pol-

yansky?" Dyakov wondered. "After all, the Ministry of Agriculture has reported that the First Deputy Prime Minister takes an interest in my work." Dyakov wrote a letter sakine for

essistance and appending a list of equipment needed and indicated which items he would like obtained in France. Within a few days a reply attived from Polyansky. His request was of Foreign Trade had been instructed to buy the necessary equipment in France.

Unfortunately, I had no time to

visit Mt. Uh. Dag and see for myself how Daykov has equipped bis observatory. It would be interesting to see how a meteorological station and a solar observatory co-exist under one roof. So far, it is the only observatory of its kind in the Soviet Union. It is called the Helio-Metorological Research Station of Gornava Storiis.

The Sun and the weather are on an equal footing in this laboratory, but when Dyakov says "Helio-Meteorological" he places the accent on "Helio". He is an astronomer at heart

Before I left, Dyakov presented me with a photograph of his brainchild, the new station. On the back, instead of the usual inscription, he wrote: "Nothing can stand up against an idea whose time has





Drawing by Andrei Nekrasov

Fruits of Deliberation

from the writings of Kooma Prutkov

SPUTNIK is publishing more thoughts and adages by Kozma Prutkov, the pen-name of Alexei K. Tolstoi and the brothers Zhemcbuzhnikov. Kozma Prutkov build up a beond reputation in the 1850-70s. His advice and maxims still bring smiles to many

turion

If you want to be happy, be happy.
When you see a caption saying
"buffalo" on an elephant's cage
don't believe your eyes.

Hair and fingernails are given to man to provide a steady but easy occupation.

Don't cut down everything that

Where is the beginning of the end that ends the beginning? The faster you drive the sooner

The cock wakes up early but the

What we've got we don't cherish; when we've lost it we cry. Even the oyster has enemies.

In the edifice of human happiness friendship erects the walls and love forms the dome.

All parts of the world have their own parts, some pretty curious. Live and learn! Like a wizard, you will eventually have the right to say that you know nothing.

If you're buffeted by fate don't despair.

despair.

There is no hatching one egg

A champagne cork, soaring noisily and instantly falling again, is a good

and instantly falling again, is a good picture of love.

It is easier to hold the reins of a

horse than the reins of government.

Cunning is the weapon of the weak and the intelligence of the

blind. Wisdom, like turtle soup, is out

of reach for many. Wisdom reduces complaints but

does not lessen suffering.

Man has his head on top so that he won't walk upside down.

Anatoli Tsupa, Self-Taught Graphic Artist



The first impression the viewer gets on seeing Anatoli Tsupa's work is one of simplicity and "oun-of-the-ordinatiness". While the composition is clear-cut, finished to perfection, there is also an element of romantic whimsticality.

Among his subjects are urban in teriors, springtime streets with rivalets bearing toy boats running through them, street lamps at night reflected in the wet asphalt, singing birds in the woods, dandelion clocks by the roadside, and behind them the stark shapes of new blocks of

The pictorial quality of his work, and his undoubted mastery give rise to that "cassal beauty" (an expression of Boris Pasternak's) that charms the eye. And although the treatment is uncomplicated and the theme is immediately understandable, one feels a need to look long at Tsuna's pictures.

by Vladimir Kirzov from the manazine "Smena" Anatoli Tsupa is 32. He has been painting and drawing since child-





The Aquarium

Comes >

hood, but has been specialising in graphic art for the past five years. To be more exact, this has been his hobby over those years, for he has been working for the greater part of the time as a skilled automatic machine-setter in a Moscow factory. But his flat has innercentiful been

transformed into a studio

Although he has had no art train and has a defined a surfeit of spare time, Anatol Tsupa has developed a high degree skill in linourting and has a definite style of his own. His technique is always interesting. At times he uses hatching of the most unexpected character, and quite often be

schieves his effect by employing a most unorthodox cutting tool on the Inoleum — a soldering iron.

In summer 1967 Anatoli Tsupa's first exhibition was held at the offices of the Leningrad magazine Zwezda. It was definitely a success, and the Leningrad Artists' Union bought several of his works. Then

followed shows in other cities, and at an exhibition in Moscow, at the offices of the illustrated youth magazine Smena, Tsupa had more than 40 works on of display. Now he is doing work on television and for a

number of magazines.

Anatoli Tsupa has become a pro-





The Songster



Artist of the Chessboard ALEXANDER ALEKHINE

from the book "Chess Vocabulary"

In 1927 thirty-five year old Alexander Alckhine became the first Russian to win the world chess championship title. He defeated the Coban grandmaster Jose R. Capablanca, who had held the world title since 1921, 184½: 15½. Alckhine won six games, Capablanca three, and 25 were drawn.

The match was more than a personal victory for Alekhine, it was a triumph for the ideas of the Russian these school, the foundation of which a attributed to Mikhail Chigorin (1850—1908)

"Alekhine's win", wrote Emanuel Lasker, the eminent German grandtaster who held the world crown for longer than anyone (from 1894 to 1921). "is the victory of an inflexible fighter over a mind that shies away from anything obscure. Capablanca aims at precision, using scientific methods. Alekhine is a greater artist, has a more searching mind, and, in principle, such creative work is on a higher level".

Richard Réti, a Czechoslovak grandmaster, remarked that "in games won by Alekhine, beneath the ice-cold cloak of modern technique, there burnt the bright and passionate flame of searchings for new paths—something quite allen to Camblaneo".

Asked which of his combinations he considered his best, Alekhine named the end play in the game with Réti in the Baden-Baden tourparent in 1925. 1

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At first plance the advantage seems to be with Black who has more pawns and whose big guns are in a more militant position. But Alekhine has planned a series of original moves far ahead; 35, RXKt ch.! (Alekhine sacrifices a rook His opponent takes it.): KXR: Alekhine sacrifices another piece, the Oueen: 36. OXR ch !!! Reshevsky is faced

Here is another fragment of Ale-

position after the 34th move in the to become demoralised by this setback and he began intensive training game with Samuel Reshevsky, the determined to regain the world American grandmaster, was as folchampionship. He succeeded in 1937 lows: when he eained an overwhelming

His defeat by the Dutch grand,

master Max Euwe in 1935 was

therefore, especially surprising,

Figure was undoubtedly a strong

opponent but his creative range was

to a match and Alekhine accepted

contest be held in Moscow and that

Union, a country be had left in 1921

in search of chess honours, three

months before the match. Both pro-

tagonists boran to prepare for the

duel, but the Second World War

In March 1946 Botvinnik again

proposed a match with Alekhine for

the world championship. Alekhine

sgreed, but he died unexpectedly

that same month in Estoril (Portu-

thess player were taken to Paris

where he had been living since the

tarly twenties, and FIDE (the

World Chess Federation) erected a

tombstone over his grave bearing

intervened

board

the inscription:

Alekhine did not allow himself

not as wide as Alekhine's.

victory over Euwe - 10 wins, 4 defeats, 11 draws compared with Euwe's one point lead in 1935 (9 wins, 8 defeats and 13 draws).

In 1938 Mikhail Botvinnik, the Soviet chess player, challenged him the challenge. He asked that the he be permitted to go to the Soviet

White - Alexander Alekhine

cedes the game.

gal), seated alone before his chess-The ashes of the great Russian with inevitable checkmate and con-

to see the accuracy with which Alekhine curries out his series of moves: there is a combination of in-

spired risk and sober calculation) 34. R(B4)-B2:Kt-Kt5 ch.; 35. K-R3-Kt-K4 ch.; 36. K-R2:RXKt!; 37. RXK+-Kt-Kt-5 ch.: 38, K-R3-Kt-Ka ch.: 39, K-R2:KtXR; 40, BXR:Kt

White resions (after 41, R-K3:

KtXB ch.: 42, RXKt:B-Q4! White would have no pieces left).

"For me chess is not a game but an art." Alekhine once said. "Yes. I consider chess an art and accept all the responsibilities it lays upon its devotees " He had phenomenal results at the

San Remo tournament in 1930 against chess stars such as Aaron Nimzowitsch. Akiba Rubinstein, Vefim Bosolyubov, Milan Vidmar Snr., Rudolf Spiclman, Geza Ma róczi and Saveli Tartakover. He won 13 games, had only two draws, and finished 3½ points ahead of his closest rival, Aaron Nimzowitsch. Alekhine sailed through the Blad

tournament (1931) in similar style. Again there were powerful players competing, but he increased his lead over the runner-up to 51/2 points. He won the tournaments in Lon-

don (1932), Berne (1932), Pastdena (1932), Paris (1933), Zuridi (1934) and Orebro (1935). His only defeat during this period was at Hastings (1933-1934) where he shared the runner-up place. In 1934 he displayed absolute ste

periority over Bogolyubay with eight wins, three defeats and 15 draws.

From the position of White's pieces after the 26th move he seems to have the initiative. But the breath-taking sacrifice of a Black rook changes the balance radically. and a series of tactical blows enables Alekhine to bring the play to a victorious conclusion. This is how the situation deve-

BBBB

d

White - Dichard Ried

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Plack - Alexander Alekhine

Se 5

loped on the board: 26. . . . R-K6!; 27. Kt-B3 (no other move would give White a satisfactory defence). This can be seen from the following: 27 B-B3:BXB: 28, PXB:PXP: 29. Kt-Kt5XP:O-R4! or this: 27. K-R2: OR-OR61: 28. Kt (QB5)-Kt3:Q-K41: 29. PXP:PXP: 30. PXR:O-R4 ch.: 31. K-Ktl:O-R6, but the rook taken produces no advantage whatcorr. 27. ...:PXP: 28. OXP:Kt-B6: 29.

OXP:OXO; 30. KtXQ:KtXP ch. 31 K-R2-Kt-K51: 32, R-B4:KtXBP; 33. B-Kt2:B-K3! (its is instructive



An Hour with Chinghiz Aitmatov

by Lyndmila Seporhnikova

from the newspaper "Moskovsky Komsomolets" Chinchiz Aitmatov, the Kirchizian writer, was born in Central Asia, in the Kirohizian village of Sheker, in 1928, and after graduating from an agricultu-

rol college in 1953 he worked as a linestack expert. His first story. Dzeido, the Newspaperman, had appeared in print in 1952, and he finally decided to change from science to writing, attending the Higher Literary School from 1956 to 1958. By 1963 he had won the Lenin Prive for his collection of stories about the Central Asian mountains and steppes. Today he is chairman of the board of the Film Workers' Union in Kirghizia, and a member of the editorial board of the magazine Novy Mir (New World). His hest-known books are Mother's Field, Farewell Gulsary, Jamila, Little Poplar with a Red Band.

T asked him what he thought of the Intesent vounger ecneration. "My own generation was educa-

ted by the war," he replied. "It made us more severe, exacting and persistent. We were ardent believers in ideals, and at times we were terribly paive. But we found life interesting.

"The present younger generation are more mature intellectually, they are more sober-minded and practical. These are positive qualities, but sometimes they develop into arropance, churlishness and cynicism,

"In our day we were more tolerant of the ways of our fathers, we respected them and showed more understanding of their failings. What I would like to see in the present vounger generation is not hypocritical deference, but innate modesty,"

agreed that in the course of endless discussions the term "cultured person" had degenerated into a backneved obrase, but I wanted to know what he thought it meant. "It's not possible to give an item-

ised list of 'ineredients'. It's a vast complex combining elements common to ereat numbers of people and purely individual qualities. It includes education, scholarship and lofty moral qualities. It also means a person who is not netty-minded and restricted in outlook. If a pleasant, amiable, clever, well-hred and well-educated person displays indiffference to another person's trouble, I would not say he was cultured. Conceit and reluctance to be concorned shout other people are the negation of culture."

Then I asked the writer why be

preferred the long short story as a vehicle.

"Above all, because of its comcorntive brevity," he said. "Of course longish novels that might eive posterity a paporama of our enoch are also needed. But I prefer the mobile genre of the lyrical story. which I feel is better suited to our

"How do you like it when screen versions of your works are made?" I asked. "On the whole, I welcome the filming of literary works, although the screen versions of my stories

sometimes disappoint me. I am profoundly convinced that film and fiction are growing closer together and that there will come a time when they will possibly be unable to exist without each other. It's not so long since the film director needed only a skeleton scenario, but now the film is inconceivable without a good literary basie

"Now story writers and novelists bave to think in terms of cinematography. Even Leo Tolstoy, were he slive today, would have to write with an eye to the screen, it seems. Of course it may sometimes happen that a literary work will suffer in conversion to a screenplay. This is why I try to take a part in adapting my writings for the screen. Recently for instance, I finished work on film versions of Farewell Gulsary and Jamila. I would say in general that fiction provides excellent material for the cinema."

I asked him about his working

habits, and whether writers kent to a strict routine.

"This point has been very well made in My Daghestan, a new book by Rasul Gamzatov. He says the writer can't plan out his working day with precision but is always working on his writing, however packed his day might be. I fully fast-moving world. And I can agree. I am constantly thinking about achieve better self-expression in it." the book I am writing, and its characters, but I need a particular mood to sit down and write. Certainly, I have periods of two to three months when I work for eight to twelve hours a day, and these are my happiest periods, because no one has yet said a word about what I am writing, and I alone know my characters, but they are already close to me and nothing exists for me but

"What are you writing now?" I

"I can only write about things I know. I know Kirghizia and her people. But I cannot undertake to write about cosmonauts, for instance. All I can do about them is to satisfy my own curiosity by learning more about them than is generally known." When I asked him if he had a

favourite book, he said that, as with most people, there were books which to him were testaments. Two of them were Leo Tolstov's Haii Murat and Hemingway's The Old Man and the See

"Of the books I have read recently, I like My Daghestan best." he said. "It is something that Gomzatov alone could write."

pen and paper."

How Old Is Our Earth?

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by Igor Krylov from the magazine "Znaniye—Sila" (Knowledge is Power)

It is generally thought that the Earth is approximately 5,000 million years old. Dr. Erich Gerling of Leningrad believes that the figure should be more than 11,000 million years. If this scientist is right, all existing concepts about the Universe will have to be revised. A ccording to some cosmogonic theories purporting to explain the origin and evolution of the Solar system, all planets, as well as the Sun, arose from one substance, a

The Sun is merely one of the countless stars of our galaxy. And our galaxy, in its turn, is just one of the giant concentrations of stars.

dust-and-gas cloud.

According to some cosmological hypotheses, 12,000 million years ago all matter contained in the Universe was concentrated in one superdense blob, which later expanded and crumbled into myriads of "splashes"—the nebulæ, stars and planets.

Professor Erich Gerling of Leningrad, however, has found that rose of the Kola Peninsula in the USSR's north were formed at least 11,000 million years ago. Hence, the Earth was a whole must be still older: it must have taken more than 1,000 million years to develop from the dast-end-gas cloud into a clot. But that makes the planets and the central star of the Solar system older than the Universe itself!

A question arises: perhaps such conclusions stem from an error? Perhaps in reality the Kola rocks are much younger than Dr. Gerling believes?



Accurate dating of rocks became possible due to the discovery of positionactivity. Back in 1902 Pierre lispic assumed that the aggregation of radioactive intotoper embedded in minerals and disintegrating one after another could zerve as a chromother, which nature started millions of years ago and which now indicates the are of this mineral.

Radioactive decay has a constant speed. The amount of Unanium 238 contained in the mineral decrease by precisely half every 4,300 million years. Diintegrating, the atoms of uranium turn into lead. By calculating the total amount of lead that cuits and by comparing it with the undecayed amount of uranium, scientists obtain the intital radioactity of the mineral and with it, its

This procedure set the age of ancient rocks at about 3,500 million years. Assuming that the formation of our planet and its crust previously took another 1,500 million years, scientists fixed the age of the Earth at some 5,000 million years.

Hundreds, if not thousands, of independent calculations made by numerous Soviet and foreign laboratories supported these estimates.

The checking was performed by the uranium-lead method as well as



SPUTNIK

by other techniques, including the potassium-argon, which was developed by Dr. Gerling and Dr. Alexander Polkanov. In 1962 the develcoment and introduction of ther technique won the two scientists the Lenin Prize.

It is easy to imagine Dr. Gerling's amazement when his own potassiumaroon method made the age of old rocks jump from the customary 3 000-4 000 million years to more than 11,000 million years!

True enough, prior to that, other scientists had obtained incredibly high figures for the age of some minerals. But they discarded these figures precisely because they thought them incredible. Besides, such sensational results, if made public, could shake confidence in radioactive dating, which had taken long years to become established. (Not so long ago, in the late 1940s. most authoritative experts questioned 3,000 million years as the age of ancient rocks obtained by the radioactive method. They thought

it was overrating.) Dr. Gerling was fully aware that his results threatened to destroy his own brainchild, the potassium-argon method. But the scientists put scientific troth above all other considerations and was the first to publish his "improbable" results.

In Dr. Gerling's opinion, the rocks he has investigated are really ultra-old, and he believes they rose to the Earth's surface from abvssal depths. Hence, the interior of our planet is much older than its crust. If so, the formation of the Earth took much longer than is commonly believed.

In any case, geochropology, a science concerned with the dating of rocks, and cosmogony, a science studying the creation of the Universe, are now facine a riddle which may trigger off a revolution in natural history.





My Lion Poopa

(from the Reminiscences of an Animal Trainer)

by Boris Eder

from the magazine "Sovietskaya Estrada i Tsirk"

I woke later than usual that dramt about lions, which in luteff was nothing new. I had recently begun to work with a group of lions and now Loften saw them in my dreams. The only thing that was new was that like lions I had dreamt about had always growled at me and attacked me, but that morning I woke up feeling that a rough tongue had been tenderly likeling my bands.

When I was really awake I began to have visions of that enormous lion which one day, just like a dog,

thing wrong

would walk along with me through the town, and live in my home: I would comb his mane and he would tenderly, gratefully lick my hands.

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After a few days I wept to the zoo. In one cage I saw a tremendous lioness lying on her side. Three jolly little lion cubs were crawling all over her warm soft belly. I only saw those three, but suddenly, from somewhere behind her back there appeared a fourth, the smallest of the lot. The cub crawled rather warily towards its mother who growled at it with displeasure. The three other cubs stopped their game and began to muzzle into the mother's belly, leaving no room for the fourth. He laid down docilely to one side and, it seemed to me, gasped plaintively. Retreating as far as I could from the lioness, I quietly tapped on the floor of the cage and called: "Puss, puss, puss!" To my surprise the cub turned its head and, misowing suddenly like a kitten, ran over to me.

I told the attendant that this was the one I would take. He nodded his head in satisfaction. "That's good, the mother doesn't like that one, and the other cubs treat it terribly. It'll be better off with you."

At home I prepared some warm sweet milk, poured it into a bottle. put a teat on it and began to feed the lion cub. Smacking its lips noisily and closing its eyes with bliss, the baby began to suck, pushing at me with its front paws, as though to belo the milk flow into its mouth Gradually the pushing grew weaker and the cub fell asleep in my arms

before it had drunk the last few

drops. That was how a baby appeared in my home for which I had to become

foster mother. In two months the cub was walking well, its head no longer seemed too hig for its body, and it would run playfully about the room pushing a ball or sharpening its claws on wooden blocks, and sometimes on the doors or the armchair. Now it was lanning up its milk from a bowl. Once a day I gave it a meal of minced meat, which it devoured with pleasure. As I lay down to rest I watched the little lion at its play for a long time, imagining it a grown beast with the character of a domestic pet.

Before long I put a collar round its neck and started taking it for walks through the town on a lead. The cub already had the name Poopa (it had proved to be a female). Poops made no attempt to get the collar off since she was accustomed to obedience: if I had put the collar on her, that meant it had

to be there. Once I took Poops to the little park. She walked along calmly by my side and suddenly stopped and

threw berself at my feet, as though hiding from danger. I looked in the direction of her glance and saw a ereat black tomost sitting under a bush and looking at my Poopa with unwinking green eyes. I waved my arm and shouted: "Shoo!" The tom disappeared in a flash and Poops gazed at me in gratitude, licking my hand. At that moment I probably seemed like Almighty God to her

Poons gradually began to take all kinds of surprises in her stride. She was no longer afraid of cats, does, horses and she had been used to human beings for a long time, having been cared for by man since her hirth Often as she sat with me on a bench in the park she would at tract the attention of teenagers who would all be dving to stroke her. As I knew Poons well. I let the vounesters sit by her side and stroke her. Poops liked it, and would spring from the bench and begin to roll in the sand or the cross as though inviting them to play with

Realising that Poons had acquired all the habits of a trained animal. I decided to get her ready for work in the circus. I wanted to have her riding a horse, so I got a large horse with a calm temperament and introduced it to Poons. They quickly became friends. It was not a circus horse and had never come across a beast of prev. It evidently took Poopa for some kind of large dog. As far as Poons was concerned she had a benign attitude to any animals she

For seven years Poops performed her circus number, "Lioness on Horsebock", and thoughout all that time she did not cause me the least bit of trouble. She went on living with me in my home, without a cage, she travelled with me to work and sat by my side in the car

But one day - it was at the Leningrad Circus - the following ened at night by an awareness of her

thing happened. Poopa finished her act and as usual, was supposed to jump off the horse. As I looked at her I suddenly saw the menacing eyes of a beast - it was no longer a tame cat sitting there, but a wild animal regarding me as its prev. At that instant Poopa sprang at me straight from the horse . . .

Perhaps if I had not seen that look in her eyes, she would have knocked me down. But I was ready to take the impact, when she pounced at me, trying to reach my throat, so I shoved my fist into her mouth and rushed from the ring, dragging the lioness with me. Behind the scenes Poons came to berself She instantly relaxed her claws, jumped away and slunk into a corner like a dog who knows he has done some-

My hand was bitten through, my wrist was broken, the terrible claws had ripped my back, but I was glad that I had managed to get Poons out of the ring. After all there had been spectators sitting there secure in the thought that she was a tame. kindly disposed animal, people on whom her eyes might just as easily have fallen as on myself . . .

That was the first time Poons spent the night in a cage at the circus. As I lay sleepless I recalled all the details of her life with me at home, the babits and behaviour of this huse tame cat. I recalled how she had often everessed her feelings for me with her tongue, nearly taking the skin off my hand with it. How sometimes I would be awak"Poopa".

gaze upon me, and when she saw my eyes open she would try to get

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me to play with her. In the morning I went to the circus to rehearse with the lion troupe. When I came up to the case where Poops had spent the night, she looked at me out of light golden eyes with slitted pupils -

the eyes of a wild beast. Poops no longer did her horseback number - I realised that her long-repressed instincts bad suddealy been aroused. Or perhaps they had been awakening gradually and even when Poons used to wake me up with her gaze they had been stirring somewhere deep down in her brain. But habit - in relation to myself, to the home, to everything that had surrounded her since she was a cub - was too deeply inersined. Now her blood had spoken. Poops had become a beast, even more dengerous for her familiarity

with the human being who had trustad her I had to return Poons to the place from which I had once taken

her as a little neglected cub. In a few days I heard that she was to be sent to a menageric in another town. Of course I wanted to see her once more, to say goodbye. At the zoo I went to her case and called to her. Poopa jumped towards me, giving a dull rost I went nearer She stood on her hind legs and pushed her front paws through the wire as though inviting me into her embrace. When Poops had been living with me we had often rolled about the setter or the

carpet in each other's "arms". This was her favourite game and I could not help myself now, I answered her call and went right up to the cage. putting my arms through the wire. So we save each other a parting hug, Then I went away, but for a long time I could hear her melancholy.

nostaleic roar. A few years later, when I was working in the Kazan circus, I heard that a menageric had come to the town When I had some spare time I went there. I wandered around the cases and came to a sudden halt by a great lioness. In her glance and bearing them seemed to me somethine familiar, and I softly called:

Her head jerked up, her pupils widened and she looked round in confusion. There was a crowd of people looking at the case, Standing behind them. I called again: "Poo-

The lioness leapt up, her whole mich saving: "So I wasn't wrong, someone really did call me . . ." I could not stay there any longer

and I walked quickly away. I never saw Poops again, And now, recalling all my life with animals. I realise that it is possible to train a wild beast, to instil into it a good attitude to people, but it is impossible to destroy its savage instincts, to root them out completely. One can only subdue them, but sooner or later they will come to the surface, without a doubt. My experience with Poops confirms this

inexorable law



and I, Empesor of Russia, liked nothing better than a military parale. In fact such speciales were this sole and all Consuming passion. The Emperor loved no one but hated a great many, above all his own mother, Epress Catherine III. To spite her, he ordered that a palace be built in which he could find schosion and indulge himself in the plessure of watching marchaesis or a paraled ground specially had out to a paraled ground specially had out the parallel ground specially had out th

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Thus arose the Pavlovsk Palace, one of the constellation of palaces around St. Petersburg, now Leningrad. (Pavlovsk is from the name Pavel, the Russian equivalent of Paul.)

Charles Cameron, a Scottish architect, began construction of the Palace in 1781. Although be never learned to speak Russian, he did develop a fondness for Russian architecture. Time passed, exars came and went,

and the Palace was added to and remodelled more than once. Another three great architects, Andrei Veronikhin, Vikenty Brenna and Karl Rossi, contributed their share to the creation of the splendid ensemble. It is interesting that with all the additions and reconstructions, deeply original as they were, no architect sinned against the overall style of the Palace.

After the 1917 Socialist Revolution the Palace came under the protection of the Soviet Government and was turned into a museum. But no law is able to protect master-

d pieces from all enemies, notably time and the devastation of war.

in the state of brebows on the best of the retreating naxis," say Mrs. Anna Zekenova, the then discretor of the museum-palace. "In the vicinity of the Palace everything bad been destroyed by fire. When we were quite near Pawlowsk, I remember, the diriver saked me which way to turn, and I, who had speat 10 years in that town, failed to the cognition of the part of

Palace. The surrounding park with its magnificent trees was gone. What was left of the Pavlovsk Palace was collapsing in front of my eyes. Hanging on barbed wire at the Palace entrance was a sign warning in German that the place was mined! "Achtung, Minen!"

The Palace had been set ablaze deliberately. Inspection showed that

ing at the smouldering ruins of the

a combustible liquid had been poured over the floors and walls.

It was fortunate that in 1941, when the German troops were advancing towards Leningrad, the Palace custodians were able to remove a major part of the Palace's price less treasures to safety.

The restoration of the Palace, in which the people of Pavlovak also took part, was an arduous, painstaking and at times seemingly bope less job. Tons of rubble were sifted by hand before as much as a small fragment of a wall, or ceiling or floor was found. Every such piece was inventorized and breserved. A

whole art school was created to train specialists to restore the magnificent palaces around Leningrad.

But the Paylovsk Palace needed rebuilding, not just restoration. How the work was done is related in a film entitled "Renaisance". This film is not only about restoration work as such, or even about the rebirth of wardevastated monuments of architecture. It is really about the rebirth of the war-warped human

In one film sequence the following episode is shown: among a loguing episode is shown: among a loguing of museum visitors an argument devlops. "Is it really necessary to recreate palaces which have been razed to the ground?" one man asks. "It cast up colosal sums of money. Wouldn't it better spent on more urgent need?" A woman replies: on the best of the property of the work of the work

The film also poses the important question of just how should architectural measurements of the past be restored. On the face of it, the ancested to the face of it, the ancested to their original appearance. Has the contemporary restorer any right to modify creations of beauty that have survived from the past? If he has, how far can he go? missing arms to the Venna de Mile. But then may we recreate works by Rossi or Vecentikhin?

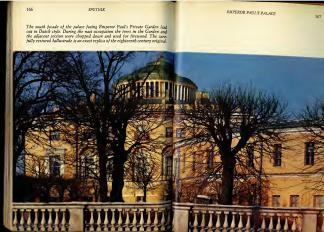
The restorer's profession is a difficult one, requiring the talent of an artist whose individuality must be suppressed for the sake of resurrecting the authenticity of what he restores. Few artists are capable of doing this. But does this suppers sion have to be complete? In 1803 many years after the Paylovsk Palace was built, part of it, including the magnificent Greek and Italian halls burnt down. Voronikhin was assigned to rebuild the structure, not just restore it. Having restored, with great care, the best elements of the work of his predecessors, he proconded to redecorate the interior and bring in an element of his own Now. 150 years later, we can say with confidence that these changes were valuable additions to the overall design and that Voronikhin's name rightfully belongs with those who are listed as the architects and designers of the Paylovsk Palace.

But suppose some contemporary restorer invents a detail which he thinks would add to the beauty of the Palace and includes it in the interior of the hall be is restoring, say, the Rossi Hall? Would we think it sacrilegious? Perhaps a century from mov our descendants would regard our contemporary as another designer of this great Palace?

Today, each of the 50 halls in the Palace has been restored in every minute, exquisite detail. The park, of course, has not yet regained its pre-war beauty. Children have planted thousands upon thousands of trees around the Palace, the same kind of trees that once surrounded it. But trees grown at the pace ordained by nature. Man alone can surpass himself.



The restored interior of a reception hall. The show-cases in the foreground contain precious possedsin of the early nineteenth century and ather objects d'art belonging to the Romanon Imperial Funds, The tensiversular design and the large utriadous ensure natural lighting for most of the day.





Before the nazit arrived to do their work of desceration, only the pictures could be esecuted from the polace in their entirety. The magnificent pattering were preserved, but the initial of the palect was utterly rained. It is bard to believe today that everything but the pictures is the careful work of restorest.

Emperor Paul's bedroom >
is the acme of luxury and taste.
On the right is the organ
clock from Holland.







This was what one of the halls of the palace looked like in February 1944. with ice to soften the starkness of the ruin.

RUSSIAN MADE EASY

Урок девятый

Lesson nine

KAK WUSHING

Есть у меня приятель Миша. Вернее, просто знакомый. В общем, мало знакомый мне человек по имени Миша. Или Коля, Kamerce

Этот мой знакомый приятель 2 — очень пущевный чедовек 3. Всегда занятый, а душевный. Видимся мы с ним на улице то ли два раза в месяц, то ли раз в два месяца. И всегда он не просто «эдрасьте!» 4 скажет, но и душевно так поинтересуется: 5

Как жизнь, старик? 6

Поинтересуется и бежит дальше. А я ему вслед тоже всжливо отвечаю:

Спасибо, жизнь в порядке!?



- 1 How/s life? (collog.)
- Used tagether the two words have an Ironic flavour: the word еприятельн octually excludes the word assessments A warm-hearted man. Here, also, the use of the word «gyweensia» is quite
- sorcounc. The word is misspelt to indicate the way people usually swallow half of
 - 4 Haw's life, old man? (collog.) Thonks, life's O.K. (colleg.)



KOŘ:

— Как жизнь, старик?

Я ему вслед, как обычно:

— Спасибо, в порядке! И впруг подумал: «За что я человека обижаю? Он моей жизнью интересуется, а я ему сухо, по-казенному: жизнь, мод. в порядке, и не твое это постороннее дело».8

Я тогда быстренько развернулся в, догнал своего знакомого приятеля и говорю ему:

— Ты меня извини, пожадуйста, Миша (или, кажется, Коля). Вот ты постоянно моси жизнью интересуенныя, но мне всё нелосуг ¹⁰ ответить попробнее. А как раз сейчас выпала свободная минутка, 11 так я тебе с уповольствием освещу вкратце 12 этот ROTTOC

— Так вот, 15 откровенно говоря, жизнь моя не совсем в порядке. Есть, конечно, отдельные приятные моменты, но неприятностей тоже хватает 14. Во-первых, здоровье. Так, с виду 15 я вроде бы и абсолютно здоров. Но это только с виду. А внутои и серпие шалит, и желудок пошаливает 16. На работе тоже не всё глапко 17. С одной стороны, месяц назад премию дали, а на той неделе выговор склонотал ¹⁸. Хотя вовсе ¹⁹ и не по моей вине, а по вине...

Тут Миша (или, кажется Коля) интеллигентно так перебил меня.

— Ты извини, старик, вот мой трамвай стоит, я очень спешу. — А мне, — голорю, — как раз 20 специть некупа. Мы с же-

ной поссорились, так до вечера лучше домой и не появляться. Сели мы с ним в трамвай, поехали. Я два билета взял. усялил его на место для инвалидов с детьми ²¹ и вполголоса ему на ухо коснудся интимной стороны моей жизни.

— Жена мне попалась 22 не очень упачная, Вкусы у нас абсолютно не совпадают. Я, как ты уже знаешь, на диете, а она, наоборот, предпочитает грузинскую кухню...

На этом интересном месте трамвай остановился, и мой знакомый приятель как-то быстро, наверное, по рассеянности выскочил без меня из трамвая. Хорошо, что я всё-таки успел выпрытнуть за ним. Обнял его крепко, по-дружески за плечи и прополжаю-

 А вот дети у меня как раз 23 неплохие. Паже хорошие. Олин — отличник ²⁶, другой — в детском саду в самодеятельности ²⁵ участвует. Вот песенку про счастливое детство поёт. Ты извини, у меня со слухом не очень,26 по слова я все помию. Сейчас спою

^{*} The normal expression is see two genos, meaning, it's none of your business. The introduction of the word enocropowees, ofthough incorrect from the point of view of grommar, gives the expression o sorcostic twist.

Used this way, the verb means to make an about turn. Usually it is used to describe the movement of a ship. "I om too busy."

¹¹ Very much like "I have a spare minute". 12 A pseudo-bureaucrotic style.

^{13 &}quot;And so ..." (collog.)

[&]quot;More thon enough" (collog.) 15 Lit "I look obsolutely healthy" (colleg.)

M Lit. mishehaving (colleg.)

A rough translation: "not a bed of roses" (colleg.)

¹⁶ Very colleg. for "I was reprimended".

^{19 &}quot;Absolutely not ... 20 The use of the words exex peas underlines the point being made and makes

the sentence more colloguiol 21 in the USSR the best seats on public tronsport are reserved for involids and people with small children. Here the author increases the from by using a combined expression: "involids with children".

²² Very collog, for "I found a wife who ..." 21 Again, the use of «New pear to underline a point.

Meaning a student who gets only the highest marks. 25 Participation in amateur tolent concerts.

И я ему эту песенку спел. Он так растрогадся, что паже сераце у него заболело. Завёл я его в аптеку, купил валерьянки бутылочку 27. Когда он в сознание пришёл, я ему снова последний куплет про счастливое детство пропел, чтобы он нить песни не потеряд, и стал делиться планами 28 на летний отпуск.

Во время этих планов Миша (или, кажется, Коля) вспомнил, что ему тоже надо срочно купить плавки в ГУМе ²⁰. Я пытался его отговорить, потому что в ГУМе наподу масса, шумно, мне о моей жизни криком кричать 39 придётся, чтобы он ничего не прослушал, и вообще там потеряться 31 можно. Но он на своём настоял 32. И действительно мы в ГУМе потерядись.

Я, конечно, сразу по радио объявил, что жду его у фонтана 33, но он, видимо, не слышая — не пришёл. Только через два часа я его случайно в Лужниках 34 отыскал.

— Что же ты, — говорю. — здесь меня ждёнь? Могли ведь и разминуться. Ну ладно 35, слушай дальше...

Он так вроде не очень обрадовался, но слушает вежливо, не перебивает. Потом вдруг такси остановил и говорит водителю: — В Шереметьево! 36

— Ты что, — поинтересовадся я, — улетаець?

- Vueraio!

— Каким рейсом?

— Банжайшимі 37

По дороге в Шереметьево я ему рассказал о моих взаимоотношениях с соседями и порадовая, что скоро получу изолированную жилплощадь 38 в кооперативе 30

В Шереметьеве выяснилось, что ближайший рейс на Махачкалу 40. Я ему на билет десятку 41 добавил. Билет мы зарегистри-

ровали, а багажа у него не было. — Ты что же, так, без вешичек? 42

— Вещички, — отвечает он, — мне малой скоростью подо-IILIIOT 63

У трана я ему вручил букет гладиолусов. Расцелованись мы. — Ну,— говорю,— Миша (или, кажется, Коля), счастливо тебе! Если вернёшься, обязательно телеграмму дай. Я встречу, расскажу, какие изменения произошли в моей личной жизни.

И он улетел. ...Из Шереметьева я возвращался пешком. Был тот самый вечер, который справедливо характеризуется зпитетом «чудный». У дома я встретия своего приятеля Сашу, вернее, знакомого, мало знакомого мне человека по имени Саша. Или Петя, ка-

— Как жизнь, старик? — бросил он и побежал дальше.

Я крикнул ему вслед:

38 A colloquial obbreviotion of susuaes naumegas, "living spoce".

The use of «sequences instead of «seques makes the sentence both ironic and

— Все в порядке, стапик!

И пошел спать.

жется

Арк, Инин, Л. Осанчук

40 A smoll town in Dogheston, on the Cospign Seq.

³⁵ Collog, for "I have a poor ear". 27 This inversion gives the sentence o humorous turn.

An abbreviation of «Госудерственный универсельный мегезии». 28 Pseudo-bureoucrotic lingo

²⁰ To wall one's head off 31 Lit. "one con get lost"

¹² Lit. "he stood on his own", i.e. insisted. 32 Local: the GUM deportment store has a fountain at which people meet. 34 A district of Moscow known for its studium.

¹⁵ A Russian equivalent of O.K. M One of Moscow's moin oirports.

If Lie "the soonest"

^{*} A co-operative housing association. 41 Collog. for "ten roubles" () His personal belongings will be sent on.

юмор и искусство

Она: — Вы уверены, что я получусь красивой 44 на вашем поптрете?

Художник: — Абсолютно. Родная мать вас не узнает 45.

Муж: - Вы уверены, что портрет моей жены получится похожим на опитинал?

Хуложник: — Настолько, что при одном взгляде на него вам булет не по себе 66

Почему они повесили эту картину?

Вилно, не смогли найти автора.

Клиент: — Вы увеличиваете снимки до размеров оригинала? Клиент: — Отлично 47. Вот снимок Останкинской телебашни.

Фотограф: — Разумеется.

РУССКИЕ ПОСЛОВИНЫ И ПОГОВОРКИ О МУЖЕ И ЖЕНЕ

С доброй женой горе — полгоря, а радость — вдвойне (48 Добрую жену взять — ни скуки, ни горя не знать 40 Добра жена дом сбережёт, а худая рукавом растрясёт ³⁰ Не тот счастлив, у кого много добра, а тот, у кого жена верна ⁵⁴

Хорошая жена — полдома 52 Доброю женой и муж честен 13

Не хвали жену телом, а хвали делом 14

Где один муж не может, там жена поможет ⁵⁵ Почитай отца и мать, а жену — впятеро 56

Без жены, что без рук 57 Без жены дом — содом ⁵⁸

Законною женою будь доволен и одною 59 Женина ласка супругу силу дает со

⁴⁸ With a good wife sorrow is halved and joy is doubled. With a good wife you'll know neither baredom nor sorrow. 20 A good wife will sove the home, o poor one will lose it.

⁵¹ The hoppy mon is not be who is rich, but he who has a faithful wife. so With a good wife a man is honest. se Don't toke pride in your wife's beouty, toke pride in her actions.

⁵⁵ Where the mon clone is helpless, his wife will help. Respect your fether and mother, and your wife - fivefold. Without o wife - without honds

A home without a wife is akin to Sadam. Se sotisfied with your lowful wife

as A wife's coress gives the husband strength.

^{4 &}quot;Will I look beoutiful?" 6 Your own mother won't recognize you (colleg.)

[&]quot;A rough translation: "It will give you the willies". 47 "Freellant"

Плохая жена и хорошего мужа портит 61

Хопошая жена — счастье 62 Муж да жена — одна душа 63

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Вез мужа жена всегда сирота 67

Мужик без жены, что гусь без воды 68 Мужем жена хороша 69

Не иши в муже красоты, а иши доброты ³⁰ Без мужа что без головы, а без жены что без рук 71

Чужая шуба — не одежда, чужой муж — не надежда 22 Милый дружок на месяц, а муж — на всю жизнь ⁷⁸

С милым мужем и зимой не стужа 74 Стужа лучие хулого мужа 75

- 41 A poor wife spoils o good husbond.
- 42 A good wife is hoppiness. 43 Husbond and wife are one soul.
- 14 Husbond and wife ore like flower and water. 45 A husband is not like a shoe, you can't shake him off your foot.
- 46 Husband and wife are one devil, meaning, never try to solve their problems, don't give odvice, just let them be. A wife without husband is always on orphon
- 45 A mon without a wife is like a goose without water.
- A wife is projectorthy through her husbond. 22 Don't look for beouty in a husband, look for kindness.
- No husband no head, no wife no hands ⁷² Another's coet is not clothes, another's husband is not to be counted on.
- 33 A lover is for a month, a husband for life. 24 With a beloved husband winter does not freeze.
- 35 Freezing winter is better thon o bod husbond.











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